

TOWVES

CANADA'S ESSENTIAL CREDENTIAL

Test Overview & Sample Test

SAMPLE

0000

TOWES is the sole property of Bow Valley College
and is sold through authorized distributors only.

Copyright © 2000 Bow Valley College. All rights reserved.

Published 2009.

For more information contact:

Conrad Murphy,
Director of TOWES & Career Advancement Centre
Bow Valley College,
332 - 6 Avenue SE, Calgary, AB, T2G 4S6
Phone: (403) 410-3200 Fax: (403) 297-4070

or

visit: www.towes.ca

and

www.bowvalleycollege.ca

The development of TOWES was funded by the National Literacy Secretariat.



Introduction

This sample booklet is intended to provide you with an overview of a TOWES test. It contains detailed information on the research, design and applications of TOWES.

Instead of using actual problem sets, we have created this booklet to show you what a TOWES test looks like. The booklet illustrates features of TOWES design such as authentic workplace documents and includes a commentary on how a test taker would go about solving a particular item. In an actual test, problem sets are carefully selected to reflect the requirements of a particular occupation, or a group of related occupations.

Items actually used in a TOWES assessment have been rigorously tested in trials and have established psychometric properties. The items in this book have not been subject to these trials and do not have defined levels of complexity.

TOWES adheres to internationally established psychometric guidelines to guarantee the quality of our assessment. All of the test items in our database remain highly confidential to ensure fair and accurate testing. The problem sets that appear in this booklet have been retired from active use.

This booklet is divided into three sections:

Section 1	TOWES Design and Application The first section is a discussion of TOWES design, its scope and utility in a variety of workplace assessment situations, and some of the features that make TOWES a unique assessment.	Page 3
Section 2	Sample TOWES Test The Sample Test has the full introduction and practice problem set (<i>Respirator Problem</i>) used by test administrators to show test-takers how to write the test. Following the introduction are ten problem sets that we feel illustrate the important features of TOWES. Write the sample test as though you were in a test situation.	Page 9
Section 3	Answers and Discussion The final section contains answers for the problem sets and a commentary on the design of selected test items.	Page 40

Blank Page

TOWES Design and Application

What is TOWES?

The quick answer is that TOWES, as its acronym suggests is a test of workplace essential skills, but this description is only partly correct. Actually, TOWES is not a single test; it is a bank of test items which can be assembled into countless test variations. Each test item is based upon an authentic workplace task, ensuring the validity of the final assessment. TOWES problem sets are collections of test items that all use the same workplace document and problem setup as the stimulus. A typical test uses only twenty of these problem sets to reliably measure essential skills. Given the number of problem sets available—and the number is growing constantly—TOWES assessments can be purposefully constructed to meet a wide variety of applications.

Because TOWES is a custom-designed and application-specific workplace assessment, it also requires a tremendous amount of expertise to design, develop and administer. This is the 'service' side of TOWES. We hate to use words like 'system' and 'process,' but without a plan, we could never deliver the results you need. Behind the visible paper product, we have a team of talented individuals, skilled in occupational analysis, test design, psychometrics, and test administration. These consultants will help you to define your assessment requirements, then analyze workplace skills and design TOWES to meet your needs. We will train test administrators and markers and assist you in developing testing protocols and procedures. We also monitor test results on a continuing basis to ensure test quality, reliability, and freedom from unwanted bias.

TOWES is also available in 3 broadly based general series (G-Series) versions. Items in the G-Series booklets represent a range of occupational settings and results can be compared to national standards established by HRSDC.

What does TOWES measure?

TOWES measures essential or employability skills in three domains—*reading text*, *document use* and *numeracy*.

Test items which test the ability to *read text* ask the test-taker to find main ideas, identify details, and make inferences from prose selections in much the same way as other tests of reading. While the questions may be familiar, the reading selections will almost certainly be unexpected and novel for most people. Instead of short passages of fiction, TOWES uses workplace documents such as selections from trade manuals, regulations, and code books. Many people are surprised at the complexity of the prose reading tasks in the workplace—especially those reading tasks carried out by workers who are nominally at an 'entry-level.'

The *document use* component of TOWES measures skills not assessed by most reading tests. It is based on the premise that there are important cognitive differences between processing prose and processing documents. Documents use a variety of information displays and are searched selectively using the characteristics of those structures. For example, to find a part number, a mechanic must scan a table and find the number at the intersection of the appropriate row (car make) and column (year of manufacture).

Many TOWES questions also probe the skills workers use to deal with the numbers and mathematical concepts encountered in text passages and documents. In the workplace, such *numeracy* applications fall into four broad categories: money mathematics; measurement and calculation; scheduling, budgeting and accounting; and data analysis.

Is TOWES research based?

Each problem set in TOWES is based on an actual task carried out by a particular group of workers in Canada. TOWES developers were able to use the mass of data collected during HRSDC'S Essential Skills Research Project (ESRP) to ensure that test content is a valid reflection of workplace reality. During three years of this research project, interviewers across Canada quizzed thousands of workers from a variety of occupations about essential skills. While the purpose of the ESRP was to create *essential skills profiles* for many of the jobs in the National Occupational Classification, it also resulted in a huge amount of information about how workers use literacy skills at work.

The view of literacy which has guided the development of TOWES follows the International Adult Literacy Survey (IALS) in conceptualizing literacy ability as knowledge and skills in three overlapping but distinct domains at five distinct levels. *Prose literacy* encompasses the ability to understand and use the information contained in prose passages. *Document literacy* includes all the skills and knowledge needed to understand and use information from documents such as tables, catalogs, maps, and scale drawings. Lastly, *quantitative literacy* is the ability to understand and use numerical information embedded in print. This 'wide' view of literacy fits well with what has been discovered about literacy activity in the workplace.

What are essential skills?

Essential skills are enabling skills required for all types of work. Skills such as reading text or writing help people perform the tasks required by their occupation and other activities of daily life, provide them with a foundation to learn other skills; and enhance their ability to adapt to workplace change. Essential Skills are not technical skills but rather the skills people use to carry out a wide variety of occupational tasks and daily activities. For example, writing skills are required in a broad range of occupations. The complexity and frequency of writing varies, of course. Some workers fill out simple forms every day, while others write daily or monthly reports.

Essential skills have been defined by Human Resources and Social Development Canada. They are:

Tested by TOWES {
Reading Text
Document Use
Numeracy
Writing
Oral Communication
Computer Use
Working with Others

Thinking Skills:

- Problem Solving
 - Decision Making
 - Job Task Planning and Organizing
 - Finding Information
 - Significant Use of Memory
- Continuous Learning

For more information about Essential Skills, visit the HRSDC Website at <http://www.hrfdc.gc.ca/en/home.shtml>

In order to move TOWES from beta version to a finished product, the development team worked closely with Statistics Canada to forge a link to IALS. This involved mixing test items from IALS with test items from the TOWES item bank in a variety of configurations to produce fifteen different test variants. These tests were then completed by a national cross-section of the Canadian public aged 16 to 65 with a variety of educational backgrounds. Test items from the International Adult Literacy Survey were written by thousands of residents of twenty countries, so linking TOWES to it has provided the development team with the statistical background required to fully interpret TOWES scores.

How is TOWES designed?

Custom test design means that the parameters for each TOWES assessment are defined by the requirements of the occupation or group of occupations under consideration. Occupational analysis reveals the context and scope of essential skills used at work. This information then guides item selection. While TOWES assesses transferable literacy and numeracy skills, the way that these skills are ‘contextualized’ varies widely. Selection of problem sets is based on three criteria. The first is the *cognitive domain* which the item is intended to measure; the second is the *type of task*; and the third is *complexity level*.

Items in a typical TOWES test are equally divided among the three cognitive domains being tested. The same number of test items are needed to establish a reliable score at whatever complexity level is chosen.

The *complexity level* of test items is determined by job or occupational requirements. Unlike norm-referenced tests which compare individual scores to the scores of the rest of

the test group, TOWES scores are referenced to the requirements of a particular job or occupation.

The *type of task* must also parallel the occupation requirements. For instance, occupational analysis may reveal that an occupation requires numeracy skills at an IALS level three for competent performance. It would also be important to know what type of tasks were typical of the occupation. Sheet metal workers perform complex measurement and calculation tasks, while a worker in a manufacturing plant may need equally sophisticated data analysis skills.

Similarly, if the information used in an occupation is displayed in columns and rows, maps or schematics, document tasks in the TOWES will use the same information display formats or types of documents. By keeping these criteria in mind, test items are chosen for content that is appropriate to the workplace and difficulty levels that will allow the greatest generalization of test results to the skills being measured.

Why was TOWES developed?

TOWES was developed in response to the need for a more valid and appropriate test of essential skills in the workplace. There are alternate tests of adult literacy and numeracy, but all were developed for other audiences or other contexts. TOWES allows workplace trainers and educators to give employers useful information about how the skills of the workforce fit with job requirements. The methodology and complexity scales developed for the Essential Skills Research Project allow the skill requirements of jobs to be described and rated in a uniform way. TOWES provides complementary information about the skills which the workforce bring to the job, and highlights the ‘fit’

between skills needed and skills available. The test results are delivered in a framework based on the IALS levels and are consistent from one occupation to another. TOWES supports the development of national standards and performance-based assessments.

Why not use existing tests?

For some time, workplace trainers and educators have expressed the need for a test of workplace essential skills which used the same complexity scales as the International Adult Literacy Survey and which would complement the job description methodology developed for the HRSDC's Essential Skills Research Project. Standard academic tests look backwards to the school curriculum and often reflect community and not workplace content. TOWES provides a more valid way of describing adult skills than grade-level comparisons which imply an equivalency between the skills used by children and those used by adults.

As test developers, we are very aware of the legal consequences of using tests which have not been specifically designed for assessing workplace skills. One good reason to use TOWES is that it has proven validity and reliability as a workplace assessment tool.

TOWES is a good predictor of success in training and can pinpoint skill gaps. In the workplace, TOWES scores have been correlated to safety and accident rates. The test can be used in a variety of HR functions including recruitment, training, needs assessment, succession planning and entrance into apprenticeship.

Who developed TOWES?

In 1998, SkillPlan and Bow Valley College formed a joint venture to develop an assessment of the literacy and numeracy skills required by workers. In 2004, Bow Valley College became the sole owner of TOWES.

Bow Valley College

Bow Valley College is an innovative, world-class college, rooted in communities, enabling people to *learn* a better living. Where people live and work, Bow Valley College contributes to the vitality of communities and the strength of the economy through innovative adult education programs and services which equip people for successful living, lifelong learning and work in a global, knowledge-based economy.

Bow Valley College is known as an outcomes-focused, innovative learning college for fast, focused, flexible quality learning services for the workplace and in the workplace anytime, anyplace. The college's mandate is to provide programs of instruction, training, and services to assist adult learners in acquiring and maintaining foundations of essential skills through the development of their communication skills, living skills, and production skills including: academic upgrading programs, career entry programs, and English as a Second Language programs.

Bow Valley College offers credit and non-credit learning on a full and part-time basis, on campus, in the community, in the workplace, and through distributed learning. Learning and services are delivered locally, provincially, nationally and internationally to individuals and organizations.

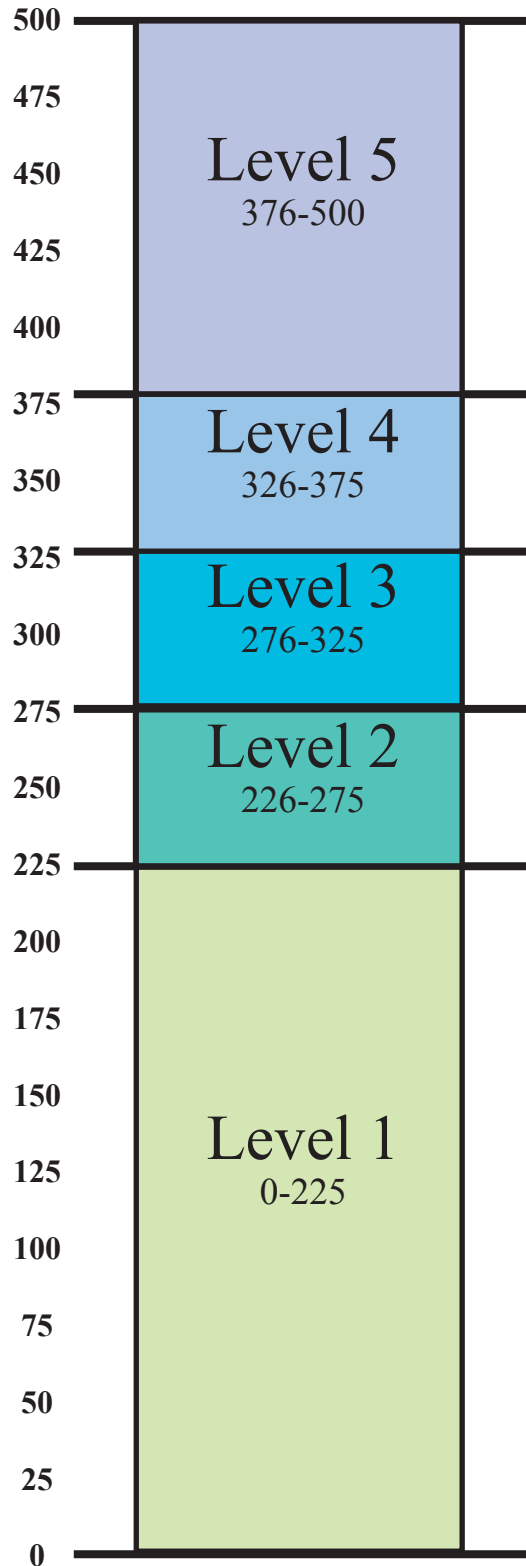
Funding for TOWES development was provided by the
National Literacy Secretariat, Human Resources Development Canada
http://www.hrsdc.gc.ca/en/gateways/nav/top_nav/program/nls.shtml

For further information about the Test of Workplace Essential Skills,
visit our website at www.towes.com

COMPLEXITY LEVELS

Levels	Reading	Document Use	Numeracy
Level 1 (0-225)	Most of the tasks in this level require the respondent to read relatively short text to locate a single piece of information which is identical to or synonymous with the information given in the question or directive. If plausible but incorrect information is present in the text, it tends not to be located near the correct information.	Tasks in this level tend to require the respondent either to locate a piece of information based on a literal match or to enter information from personal knowledge onto a document. Little, if any, distracting information is present.	Tasks in this level require the respondent to show an understanding of basic numerical ideas by completing simple tasks in concrete, familiar contexts where the mathematical content is explicit with little text. Tasks consist of simple, one-step operations such as counting, sorting dates, performing simple arithmetic operations or understanding common and simple percents such as 50%*.
Level 2 (226-275)	Some tasks in this level require respondents to locate a single piece of information in the text; however, several distracters or plausible but incorrect pieces of information may be present, or low-level inferences may be required. Other tasks require the respondent to integrate two or more pieces of information or to compare and contrast easily identifiable information based on a criterion provided in the question or directive.	Tasks in this level are more varied than those in Level 1. Some require the respondents to match a single piece of information; however, several distracters may be present, or the match may require low-level inferences. Tasks in this level may also ask the respondent to cycle through information in a document or to integrate information from various parts of a document.	Tasks in this level are fairly simple and relate to identifying and understanding basic mathematical concepts embedded in a range of familiar contexts where the mathematical content is quite explicit and visual with few distracters. Tasks tend to include one-step or two-step processes and estimations involving whole numbers, benchmark percents and fractions, interpreting simple graphical or spatial representations, and performing simple measurements.
Level 3 (276-325)	Tasks in this level tend to require respondents to make literal or synonymous matches between the text and information given in the task, or to make matches that require low-level inferences. Other tasks ask respondents to integrate information from dense or lengthy text that contains no organizational aids such as headings. Respondents may also be asked to generate a response based on information that can be easily identified in the text. Distracting information is present, but is not located near the correct information.	Some tasks in this level require the respondent to integrate multiple pieces of information from one or more documents. Others ask respondents to cycle through rather complex tables or graphs which contain information that is irrelevant or inappropriate to the task.	Tasks in this level require the respondent to demonstrate understanding of mathematical information represented in a range of different forms, such as in numbers, symbols, maps, graphs, texts, and drawings. Skills required involve number and spatial sense, knowledge of mathematical patterns and relationships and the ability to interpret proportions, data and statistics embedded in relatively simple texts where there may be distracters. Tasks commonly involve undertaking a number of processes to solve problems.
Level 4 (326-375)	These tasks require respondents to perform multiple-feature matches and to integrate or synthesize information from complex or lengthy passages. More complex inferences are needed to perform successfully. Conditional information is frequently present in tasks at this level and must be taken into consideration by the respondent.	Tasks in this level, like those at the previous levels, ask respondents to perform multiple-feature matches, cycle through documents, and integrate information; however, they require a greater degree of inference. Many of these tasks require respondents to provide numerous responses but do not designate how many responses are needed. Conditional information is also present in the document tasks at this level and must be taken into account by the respondent.	Tasks at this level require respondents to understand a broad range of mathematical information of a more abstract nature represented in diverse ways, including texts of increasing complexity or in unfamiliar contexts. These tasks involve undertaking multiple steps to find solutions to problems and require more complex reasoning and interpretation skills, including comprehending and working with proportions and formulas or offering explanations for answers.
Level 5 (376-500)	Some tasks in this level require the respondent to search for information in dense text which contains a number of plausible distracters. Others ask respondents to make high-level inferences or use specialized background knowledge. Some tasks ask respondents to contrast complex information.	Tasks in this level require the respondent to search through complex displays that contain multiple distracters, to make high-level text-based inferences, and to use specialized knowledge.	Tasks in this level require respondents to understand complex representations and abstract and formal mathematical and statistical ideas, possibly embedded in complex texts. Respondents may have to integrate multiple types of mathematical information, draw inferences, or generate mathematical justification for answers

COMPLEXITY LEVELS



TOWES

CANADA'S ESSENTIAL CREDENTIAL

SAMPLE TEST BOOKLET

SAMPLE

0000

TOWES is the sole property of Bow Valley College
and is sold through authorized distributors only.

Copyright © 2000 Bow Valley College. All rights reserved.

Published 2009.

For more information contact:

Conrad Murphy,
Director of TOWES & Career Advancement Centre
Bow Valley College,
332 - 6 Avenue SE, Calgary, AB, T2G 4S6
Phone: (403) 410-3200 Fax: (403) 297-4070

or
visit: www.towes.ca
and
www.bowvalleycollege.ca

The development of TOWES was funded by the National Literacy Secretariat.



Disclaimer

This booklet is intended for SAMPLE USE ONLY.

Unlike the questions used in a real TOWES assessment, the questions in this Sample Booklet have not been validated and will not give an accurate measure of an individual's Essential Skills.

The questions contained within the Sample Booklet are for informational purposes ONLY. They are not to be used in place of an actual TOWES assessment.

All of the information, documents, pictures and data contained within the Sample Booklet are confidential and are not to be reproduced for commercial use. This booklet has been created for sample use only.

Blank Page

Test Overview

This test, the Test of Workplace Essential Skills or TOWES, measures some of the essential or basic skills people use at work. These skills include reading, using forms and documents, and solving problems which involve numbers.

The questions are grouped in problem sets. Each problem set asks questions relating to a document sample which is taken from a work situation. The documents used in the test include forms, maps, and charts, as well as reading selections from service manuals and regulations.

Some of the work situations may not be familiar to YOU, but you probably have enough general ability to answer the question. Remember this is a test of reading. **All the information required to answer the questions can be found in the document samples.**

Don't rush, work carefully. Imagine yourself as a worker in the situation suggested by the question. The test questions are not meant to trick you but to allow you to show what skills you have. Complete all the questions to the best of your ability.

Test Instructions

To answer questions

To answer questions, you can use a ball point pen or a pencil—just make sure that your answers can be easily read. If you have a yellow highlighter pen, use it in places where you are asked to *mark the reading selection*.

1. Some questions ask you to mark words or phrases. You can do that by:

Highlighting the word or section asked for.

Underlining it with pen or pencil.

Circling it.

All are correct.


2. Some questions ask you to write out an answer. When you see an area marked like this, an answer is required. Most questions do not require answers to be in full sentences.

Put your answer inside the grey box.

3. Another type of question asks you to fill in an entry form as if you were the person doing the job.

Application

Company _____	Date _____
Name _____	
Position _____	ID # _____



(This jagged line indicates that part of the document is not shown.)

Changing your Answer

What if you make a mistake and want to change your answer? Erase it, or use XXXXX to show that this is not your final answer.



Rough Work

You are welcome to do all your rough work and calculations in the test booklet.

Directional Arrows



Some questions allow you to fold out pages so that you can see the information you require without flipping pages. Use the black arrows to find the document to which the question refers.

Time

Generally it takes about two and a half hours to complete this test. In some circumstances, additional time may be allowed.

Questions can be answered in any order. Keep in mind that each set of questions contains questions with different levels of difficulty. You will not lose marks for answering incorrectly. Some answers give marks for part of the answer being correct. We encourage you to try each question.

Equipment

Basic calculators may be used to calculate answers. Scientific calculators (ones with programmed formulas) are not allowed.

Turn over the page for a sample problem

Example - Respirator Parts Problem

Look at the tables and diagram from the air purifying respirator guide on the opposite page.



Painters wear respirators to filter out dangerous vapours and particles.

Sample Question

A painter needs a basic facepiece for a medium-sized 7700 series respirator. What is the catalog number for this part?

1

<i>7700-11M</i>

Sample Question

What is the catalog number and description of the 7700 series part shown below?

2



<i>_____</i>	<i>_____</i>
<i>Catalog number</i>	<i>Description</i>

Sample Question

What is the catalog number and description of the part from the 7700 series mask which is shown below?

3



<i>_____</i>	<i>_____</i>
<i>Catalog number</i>	<i>Description</i>

8.2 PREPARE FOR USE

- 1) Install a new pair of air-purifying elements.
- 2) Perform a fit check to make sure that components are functioning properly.

9. REPLACEMENT PARTS

COMPLETE ASSEMBLIES		
CATALOG NUMBER		DESCRIPTION
5500 SERIES	7700 SERIES	
5500-30S	7700-30S	Facepiece Assembly Complete, Small
5500-30M	7700-30M	Facepiece Assembly Complete, Medium
5500-30L	7700-30L	Facepiece Assembly Complete, Large

COMPONENTS (See Figure 1.1)			
ITEM	CATALOG NUMBER		DESCRIPTION
	5500 SERIES	7700 SERIES	
1	5500-16	7700-16	Inhalation Connector
2	5500-17	7700-17	Inhalation Valve
3	5500-18	7700-18	Exhalation Valve
4	5500-19	7700-19	Exhalation Valve Seat
5	5500-20	7700-20	Exhalation Valve Guard
6	5500-92	7700-92	Cradle Suspension System
7	5500-11S	7700-11S	Basic Facepiece, Small
7	5500-11M	7700-11M	Basic Facepiece, Medium
7	5500-11L	7700-11L	Basic Facepiece, Large

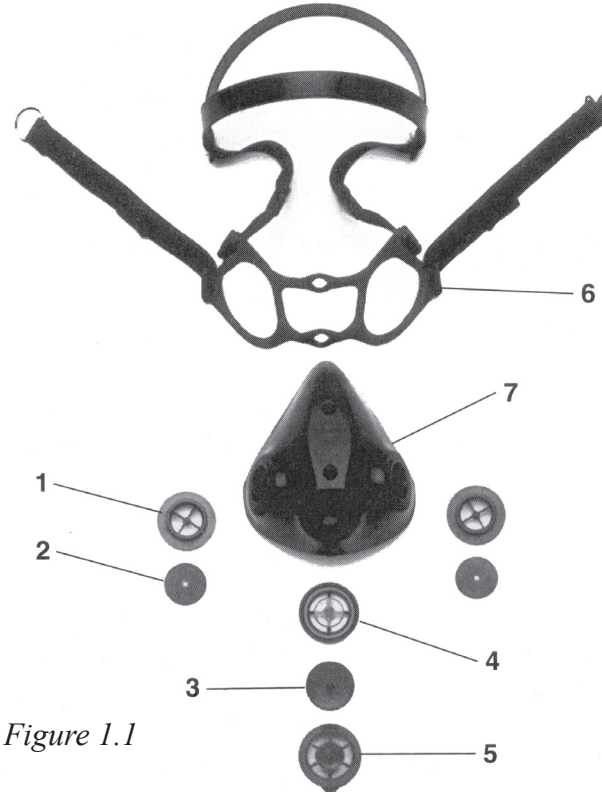


Figure 1.1

Turn over the page and begin the test

Meal Tray Problem

Look at the information about *Serving and Removing Trays* on the opposite page.



Nurse Aides in hospitals often bring meals on trays to patients.

Question

1

Before handing out trays, what information does the nurse aide need from the registered nurse?

Question

2

Highlight, underline or circle the words that explain what the nurse aide should do immediately after he or she has cleared the area where the patient will eat.

mark the reading selection

Question

3

Some patients receive special diets. How can the nurse aide be sure the right tray is served?

Question

4

A patient is unable to use one arm. How can the nurse aide make it easier for him to eat his meal?

SERVING AND REMOVING TRAYS

Procedure:

1. Clear the area where the patient will eat.
2. Check the tray for spilled liquids, missing items, or ordered food that is missing.
3. Compare the name on the tray to the name on patient's identification bracelet.
4. Place the tray so that it faces the patient, and remove the food covers.
5. Open milk cartons and cereal boxes, butter toast, cut up meat, and otherwise assist as necessary.

Rationale:

- Clutter may cause patient's belongings to fall or become misplaced.
- The tray should be complete, orderly and tidy so that eating can be enjoyable.
- Avoid serving the tray to wrong patient.
- Positioning the tray and removing the covers allows easy access for the patient.
- Not all patients find it easy to perform these tasks.

NOTE THE FOLLOWING

1. Be sure patient is properly positioned for eating.
2. Note foods the patient ate (was appetite good, were there certain foods he did not like?).
3. If a patient is to have his intake recorded, be sure to record same before removing tray.
4. Remove tray when patient is finished eating and leave the area tidy.
5. Always check with the registered nurse prior to serving. Some patients may be scheduled for surgery or tests.

TD1 Form Problem

Look at the Personal Tax Credits Return (TD1) Form on the  following page.

Allan is a full-time student at Bow Valley College. He just got a job tending bar at a local hotel. His new employer wants him to fill out a TD1 form. Allan is single and has no dependents. He will be a full-time student for 8 months in 2001 and will pay \$1,800.00 for tuition fees. He has not received any bursaries or scholarships.

Question 1 Highlight, circle or underline the words that explain why Allan's new employer needs the information on the Personal Tax Credits Return (TD1) form.

mark the TD1 form

Question 2 Enter Allan's *tuition and education amounts* into the correct box on the TD1 form.

write the amount on the form

Question 3 Calculate Allan's *total claim amount* and enter this amount on the form.

write the amount on the form



Canada Customs
and Revenue Agency

Agence des douanes
et du revenu du Canada

2001 PERSONAL TAX CREDITS RETURN

TD1

Complete this TD1 form if you have a new employer or payer and you will receive salary, wages, commissions, pensions, Employment Insurance benefits, or any other remuneration. Be sure to sign and date it on the back page and give it to your employer or payer who will use it to determine the amount of your payroll tax deductions.

If you do not complete a TD1 form, your new employer or payer will deduct taxes after allowing the basic personal amount **only**.

You **do not** have to complete a new TD1 form every year unless there is a change in your personal tax credit amounts. Complete a new TD1 form no later than seven days after the change.

You can get the forms and publications mentioned on this form from our Internet site at www.ccr-aadrc.gc.ca or by calling 1-800-959-2221.

Last name	First name and initial(s)	Date of birth (YYYY/MM/DD)	Employee number
Address including postal code		For non-residents only – Country of permanent residence	Social insurance number

<p>1. Basic personal amount – Every resident of Canada can claim this amount. If you will have more than one employer or payer in 2001, see the section called "Income from other employers or payers" on the back page. If you are a non-resident, see the section called "Non-residents" on the back page.</p>	\$7,412
<p>2. Age amount – If you will be 65 or older on December 31, 2001, and your net income for the year will be \$26,941 or less, enter \$3,619. If your net income will be between \$26,941 and \$51,068 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return</i> (TD1-WS) and complete the appropriate section.</p>	
<p>3. Pension income amount – If you will receive regular pension payments from a pension plan or fund (excluding Canada or Quebec Pension Plans (CPP/QPP), Old Age Security and guaranteed income supplements), enter \$1,000 or your estimated annual pension income, whichever is less.</p>	
<p>4a. Tuition and education amounts (full-time) – If you are a student enrolled full-time at a university, college, or educational institution certified by Human Resources Development Canada, enter the total of the tuition fees you will pay, if more than \$100 per institution, plus \$400 for each month that you will be enrolled full-time.</p>	
<p>4b. Tuition and education amounts (part-time) – If you are a student enrolled part-time at a university, college, or educational institution certified by Human Resources Development Canada, enter the total of the tuition fees you will pay, if more than \$100 per institution, plus \$120 for each month that you will be enrolled part-time.</p>	
<p>5. Disability amount – If you will claim the disability amount on your income tax return by using Form T2201, <i>Disability Tax Credit Certificate</i>, enter \$6,000.</p>	
<p>6. Spousal amount – If you are supporting your spouse or common-law partner who lives with you, and his or her net income for the year will be \$629 or less, enter \$6,294. If his or her net income for the year will be between \$629 and \$6,923 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return</i> (TD1-WS) and complete the appropriate section.</p>	
<p>7. Equivalent-to-spouse amount – If you do not have a spouse or common-law partner and you support a dependent relative who lives with you, and his or her net income for the year will be \$629 or less, enter \$6,294. If his or her net income for the year will be between \$629 and \$6,923 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return</i> (TD1-WS) and complete the appropriate section.</p>	
<p>8. Caregiver amount – If you are taking care of a dependant who lives with you, whose net income for the year will be \$11,953 or less, and who is either your or your spouse's or common-law partner's:</p> <ul style="list-style-type: none"> • parent or grandparent age 65 or older, or • relative age 18 or older who is dependent on you because of an infirmity, <p>enter \$3,500. If the dependant's net income for the year will be between \$11,953 and \$15,453 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return</i> (TD1-WS) and complete the appropriate section.</p>	
<p>9. Amount for infirm dependant age 18 or older – If you are supporting an infirm dependant age 18 or older who is your or your spouse's or common-law partner's relative, who lives in Canada, and his or her net income for the year will be \$4,966 or less, enter \$3,500. You cannot claim an amount for a dependant claimed on line 8. If the dependant's net income for the year will be between \$4,966 and \$8,466 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return</i> (TD1-WS) and complete the appropriate section.</p>	
<p>10. Amounts transferred from your spouse or common-law partner – If your spouse or common-law partner will not use all of his or her age amount, pension income amount, tuition and education amounts (maximum \$5,000), or disability amount on his or her income tax return, enter the unused part.</p>	
<p>11. Amounts transferred from your dependant – If your dependant will not use all of his or her tuition and education amounts (maximum \$5,000) or disability amount on his or her income tax return, enter the unused part.</p>	
<p>12. TOTAL CLAIM AMOUNT – Add lines 1 through line 11. Your employer or payer will use this amount to determine the amount of your payroll tax deductions.</p>	<div style="border: 1px solid black; padding: 2px; display: inline-block;">\$</div>

Form continues on the back _____

Road Construction Problem

Look at the roadworks drawing on the following page.



Highway construction workers prepare road beds to create the finished elevations proposed in engineering plans.

Question

1

How much lower will the roadbed be at the end of the 85.4 metre section shown in the plan than it was at the start?

Question

2

The existing ground elevation at the fifth station (0+60) is at 81.639 metres. What depth of fill does the excavator need to add to raise it to finished grade?

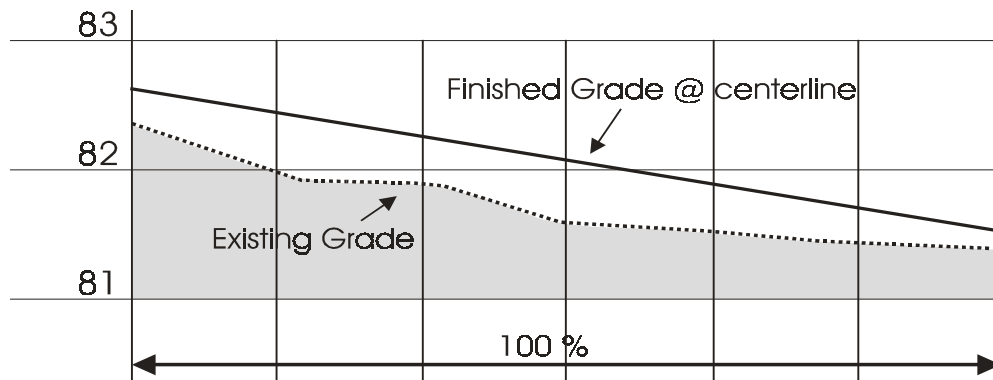
Question

3

A later section of the highway is to be constructed at a 3.4% uphill grade.

- a. Over a distance of 100 metres how much will the highway rise?

- b. The finished road elevation at the beginning of a 120 metre section is 42.518 metres. What should the elevation be at the end of the section if the uphill grade is 3.4%?



Proposed Finished Paving Elev's	82.518	82.368	82.218	82.068	81.918	81.768	81.664
Existing Elevations	82.368	82.039	81.914	81.856	81.639	81.450	81.508
Stationing	← 0+00	← 0+15	← 0+30	← 0+45	← 0+60	← 0+75	← 0+85.4

Project: Roadworks - Thorncliffe Drive


Drawing 1 of 1

Drawn by: BT

Design: BT

Note: All measurements in metres

Transformer Selection Problem

Look at the transformer selection chart on the opposite page. 

Toroidal (doughnut shaped) transformers are custom-built as they are ordered. Production clerks in electronic assembly plants order transformers by part number according to the specifications they are given.

Question

1

What feature of the transformer is indicated by an 'A' as the third element in the part number?

		A					
--	--	---	--	--	--	--	--

--	--	--	--	--	--	--	--	--	--

Question

2

What are the first two numbers in the part number of a transformer with a power rating of 300 VA (volt-amp)?

--	--	--	--	--	--	--	--	--	--

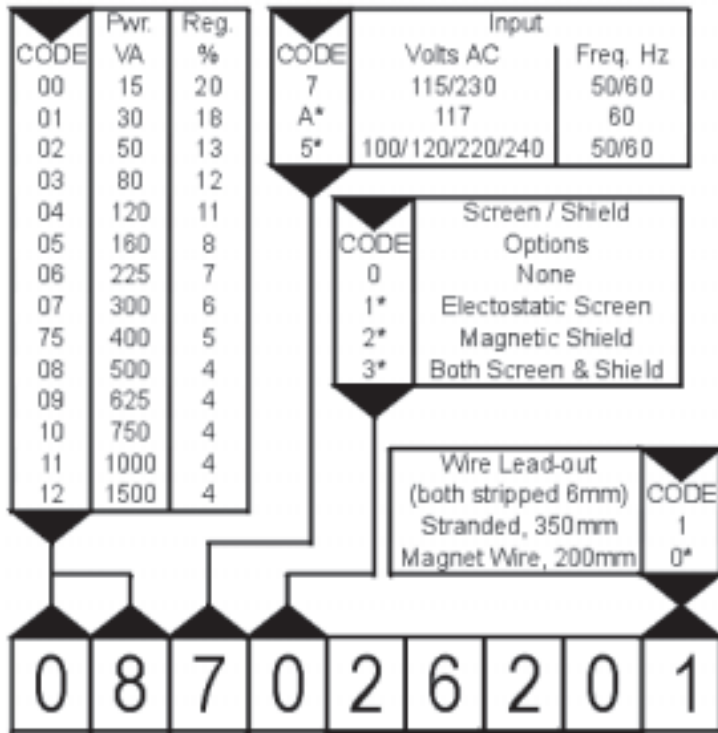
Question

3

Build the part number for a PLITRON toroidal transformer with the following specifications: 1000 VA; 115/230 Volts AC input; 50/50 Volt output; centre potted and drilled; thermal protection by resetting switch; 350 mm stranded wire lead outs.

--	--	--	--	--	--	--	--	--	--

Building a PLITRON order number



The selection chart is an aid to building a PLITRON part number. In this example, part number 087026201, describes a 500VA toroidal transformer with a dual input (115/230 VAC), 2 x 40 VAC outputs (at 6.25 A each), a potted and drilled center, and stranded leads. (* Indicates an option which is subject to minimum order.)

CODE	Output (VAC RMS)		
	Sec1	Sec2	Availability
10	6	6	15 to 50VA
11	9	9	15 to 120VA
12	12	12	15 to 225VA
13	15	15	15 to 300VA
14	18	18	"
27	20	20	15 to 400VA
15	22	22	"
60	24	24	15 to 750VA
16	25	25	15 to 1000VA
17	30	30	"
41	31	31	"
19	33	33	"
18	35	35	"
35	38	38	All models
26	40	40	"
25	45	45	"
33	50	50	"
42	55	55	"
52	60	60	"
28	110	—	"
50	117	—	"
29	220	—	"
30	240	—	"
53	175	175	50 to 1500VA

CODE	Thermal Protection Options
0	None
1*	Resetting Switch
2*	One Shot Fuse

CODE	Mounting
2	Potted Center, drilled
1*	None
0*	Metal Disk, 2 Neo washers Bolt, Nut & Flat washer



Courtesy PLITRON Manufacturing Inc., Toronto, Ontario.

Meeting Room Problem

Look at the *Capacities & Layout* information on the following page.



Workers who plan meetings and conferences have to book meeting rooms and choose seating arrangements.

Question

1

What is the maximum number of people that can be seated in Boardroom style at the Blue Bay Hotel?



Question

2

You want to place tables along a wall to hold books for display. How many 8-foot-long tables will fit along the longest wall of the Fraser Room?



Question

3

Cost increases with room size so you want to book the smallest room that will hold your people. Which room and what room layout would be best for showing a video to a group of 15 people?



Question

4

How many tables will be needed to seat 70 people in a room arranged in Classroom style?



C A P A C I T I E S & L A Y O U T

Blue Bay Hotel • Hotel Facilities and Services

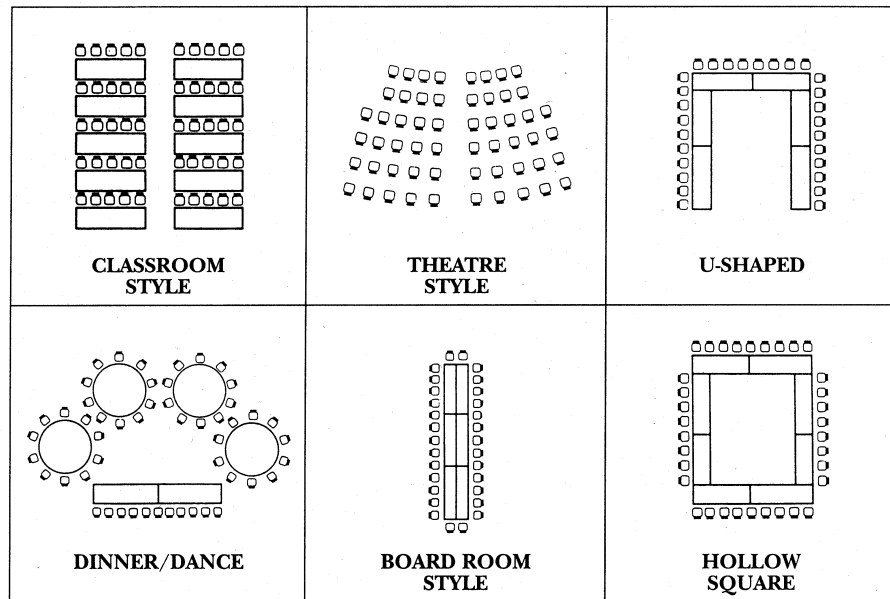
MEETING ROOM SET-UP, MAXIMUM CAPACITY

Room	Reception Style	Theatre Style	Boardroom	Hollow Square	U-Shape	Classroom	Rounds	Dinner Dance	Square Footage	Dimensions
Cypress	200	150	44	44	34	70	80	60	1320	30 x 44
Terrace	40	40	18	20	16	24	32	N/A	462	21 x 22
Fraser	30	30	16	16	14	12	24	N/A	392	14 x 28

Room Layouts

The following layouts shown are the most commonly used for meetings and banquets.

However, we will be pleased to assist or make other recommendations, should you require a special layout tailored towards your presentation or function.



Newsletter Problem

Look at the page from the NATO Industrial Advisory Group Newsletter.



This article reports on a meeting held at the Defence Research Establishment Suffield (DRES) in Alberta.

Question 1 What was the subject of the presentations and demonstrations at this meeting?

Question 2 Highlight, underline, or circle the words in the article that identify the equipment shown in photographs A and B.

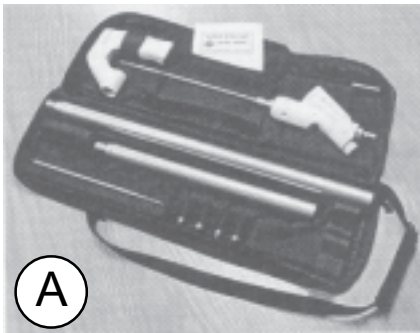
mark the article

Question 3 How does the *Smart Probe* distinguish between rocks and mines?

Question 4 What feature of newer land-mines makes detecting them difficult?

The next day the Group returned to DRES for further presentations and demonstrations by US and Canadian firms involved in detection and neutralization of mines. The US NATO representative gave a presentation on two hand-held mine detectors currently being evaluated by the US DoD for detecting non/low metallic mines. The two US firms developing the products are Coleman Research Corporation with a modification to the AN-19/2 Mine Detecting set with a Drop-In Ground Penetrating Radar System (DIGS) and GDE Systems Ground Penetrating Radar using a balanced bridge sensor. Later in the day, the participants were given the opportunity to see these products in actual scenarios and to try out the machines themselves.

DEW Engineering, Ottawa, Ontario



provided an interesting presentation and demonstration of the newly developed "Smart Probe." This instrumented prod-der, developed by DRES and manufac-tured and distributed by DEW Engineer-ing, once in contact with a "tar-get" sends an interrogating ultra-sonic pulse down the needle. The return echo is digitized and pro-cessed to identify the materiel contacted. As a result mines can be distinguished from rocks, for example, without excavation.



Once the presentation and demon-strations of the more conventional modes of detection were completed, the Group turned their attention to the Improved Landmine Detector Project underway in DRES and in conjunction with Computing Devices Canada Ltd. This project is develop-ing a teleoperated multi-sensor vehicle-mounted mine detector for low metal content and non-metallic mines for a peacekeeping role on roads and tracks.



Princess Cruises Problem

Look at the information about cruise ship bookings on the page opposite.



Travel and cruise ship agents use information in cruise ship catalogues to describe to their clients what the ships and cruises offer.

Question List five recreational facilities offered on this cruise ship.

1

Question On the fares chart, indicate which is the least expensive type of accommodation offered on the Atlantic Deck.

2

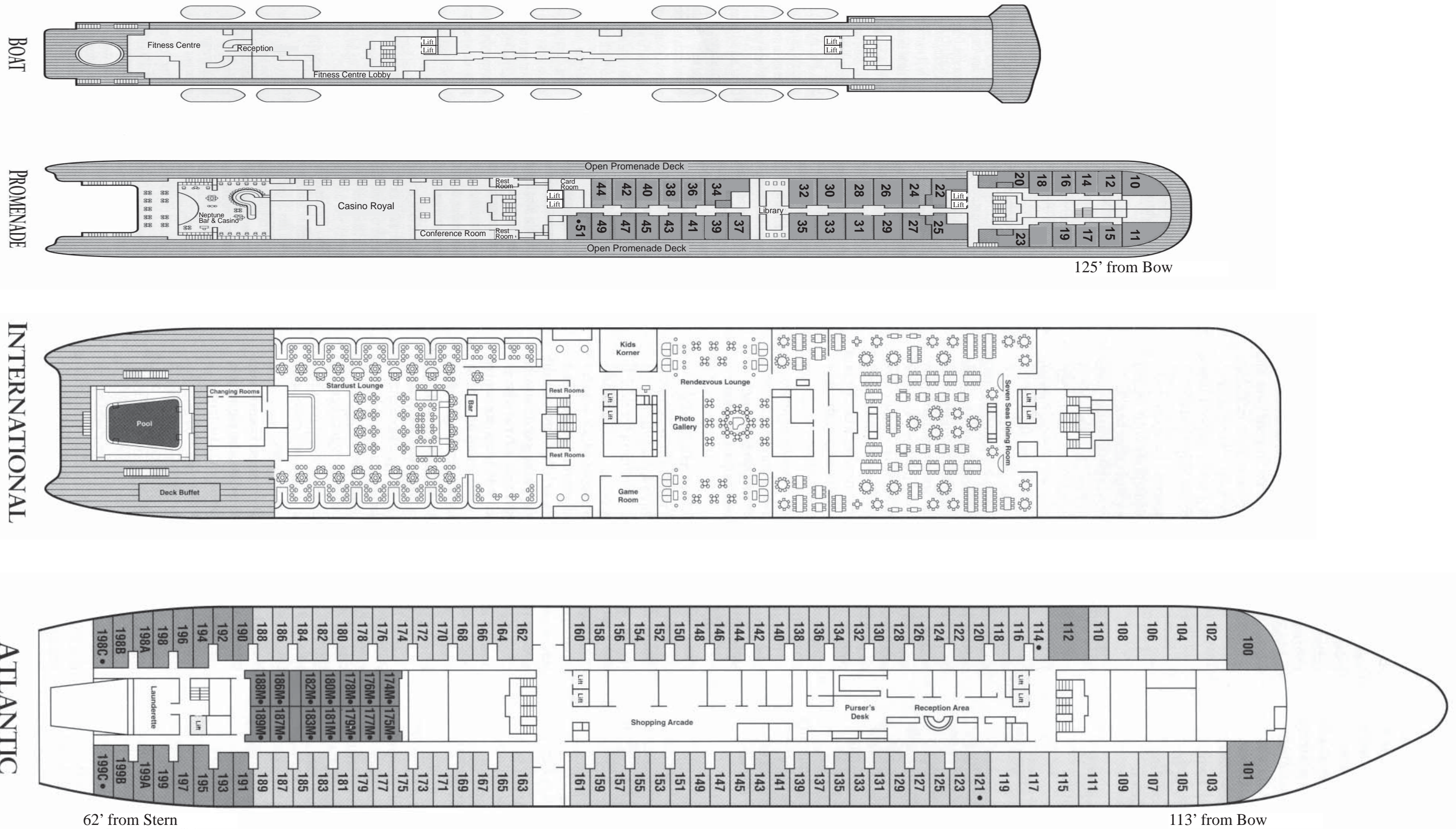
<i>Mark the cruise fares chart</i>

Question An elderly couple want to take a 12-day cruise. They prefer to be on the highest deck that has an outside stateroom (not a suite). They want to have a double bed. Because they can't walk far, they need to be close to the elevators (lifts). Indicate the most appropriate stateroom on the deckplan.

3

<i>Mark the deckplan</i>

Deckplan



Excerpt from cruise brochure, courtesy of Princess Cruises. Reproduced with permission.



Fold this page out

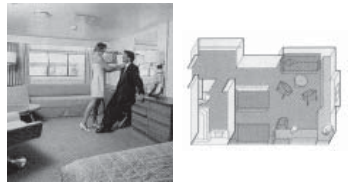


Suite with Private Balcony
(categories AA & A)

Private bedroom with double bed or twin beds. Sitting room area and private balcony for entertaining. TV. Refrigerator. Bath with tub and shower.

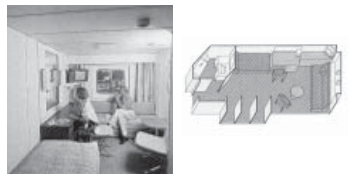
Mini-Suite
(categories BB & B)

Picture window with sitting area for entertaining. Two lower beds. Bath with tub/shower. TV and refrigerator.



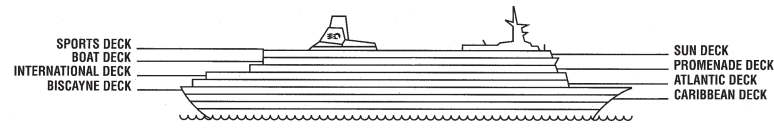
Outside Deluxe
(categories CC, C & D)

Picture window with sitting area for entertaining. Two lower beds. Bath with tub/shower. TV and refrigerator.



Outside or Inside Double
(categories FF, F, GG, G, HH, H, II, I, J & K)

Outside staterooms have two windows or portholes. Two lower beds or one double bed. TV. Bath with tub and/or shower.



830 passengers. 28,000 gross tons. 674 ft. in length. Two swimming pools. Spa. Sauna. Casino. Fitness Center. Paddle tennis court. Beauty salon. Boutiques. Spacious staterooms. Bahamian registered.

Stateroom Category	ACCOMMODATIONS	CRUISE-ONLY FARES			
		Value May 29, Sep 2	12-DAY Standard Jun 10, Aug 21	Peak Jun 22- Aug 9	10-DAY Value May 19, Sep 14
		COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
AA *	Outside suite with private balcony. SUN	\$5,949	\$6,049	\$6,149	\$5,369
A *	Outside suite with private balcony. SUN	\$5,199	\$5,299	\$5,399	\$4,619
BB	Outside mini-suite. PROMENADE	\$4,699	\$4,799	\$4,899	\$4,119
B	Outside mini-suite. PROMENADE, ATLANTIC	\$4,599	\$4,699	\$4,799	\$4,034
CC *	Outside deluxe – two lower beds. PROMENADE	\$4,349	\$4,449	\$4,549	\$3,834
C	Outside deluxe – two lower beds. PROMENADE	\$4,249	\$4,349	\$4,449	\$3,749
D	Outside deluxe – two lower beds. ATLANTIC	\$4,149	\$4,249	\$4,349	\$3,664
FF *	Outside – two lower beds. ATLANTIC	\$3,799	\$3,899	\$3,999	\$3,364
F *	Outside – two lower beds. ATLANTIC	\$3,699	\$3,799	\$3,899	\$3,279
GG *	Outside – two lower beds. BISCAYNE	\$3,599	\$3,699	\$3,799	\$3,194
G *	Outside – two lower beds. BISCAYNE	\$3,499	\$3,599	\$3,699	\$3,109
HH *	Outside – two lower beds. CARIBBEAN	\$3,399	\$3,499	\$3,599	\$3,024
H *	Outside – two lower beds. CARIBBEAN	\$3,299	\$3,399	\$3,499	\$2,939
II	Inside – one double bed. ATLANTIC	\$3,099	\$3,199	\$3,299	\$2,754
I *	Inside – two lower beds. BISCAYNE	\$2,999	\$3,099	\$3,199	\$2,669
J *	Inside – two lower beds. CARIBBEAN	\$2,899	\$2,999	\$3,099	\$2,584
K *	Inside – two lower beds. BISCAYNE, CARIBBEAN	\$2,799	\$2,899	\$2,999	\$2,499
	3rd/4th person in stateroom (adult/child)	50%	50%	50%	50%
	Port/Government Fees: 12-Day Cruises	\$ 152	\$ 152	\$ 152	
	10-Day Cruises				\$ 127

CRUISE FARES (Columns 1-4) Fares are per person, U.S. dollars, based on double occupancy. 3rd/4th person fare is 50% of the above rate and is eligible for 50% of the applicable Love Boat Savers discount.

SINGLE OCCUPANCY FARES For categories AA through D: 200% of full tariff. For categories FF through K: 160% of full tariff. (Single fares are eligible for Love Boat Savers discount).

*Some staterooms in this category will accommodate a third and/or fourth person.

*Some staterooms in these categories may have cabins with one double bed.

Employment Insurance Problem

Look at the *Employment Insurance Benefits* brochure on the page opposite.

Employees use Employment Insurance Benefits brochures to better understand their insurance benefits policies.

Question 1 A hospital worker applied for EI benefits the day after she was laid off from her job. If everything is in order, when can she expect her first cheque?

Question 2 Paul's first job was part time for a theatre company. He worked a total of 700 hours in his first year. Does he qualify for EI benefits?

Question 3 Morgan has just been laid off from his first job. What must he take with him when he goes to apply for employment insurance benefits?

1. _____
2. _____

Question 4 Kaspar, an assembly worker, worked 40 hours a week for the last 33 weeks. The unemployment rate in his city, Winnipeg, was 5.8% this month. How many weeks of EI benefit payments can he expect if he doesn't find another job?

Excerpt from cruise brochure, courtesy of Princess Cruises. Reproduced with permission.

Regular benefits

Regular benefits are paid to people who are available for and able to work but who can't find a job. You must be in Canada in order to receive regular bene-

Where to apply?

At any Government of Canada, Employment Insurance office.

When to apply?

Fill out an Employment Insurance application as soon as you are out of work. You will need two pieces of information:

- your Social Insurance Number (SIN)
- your Record of Employment (ROE)

When to expect your first cheque?

If you provide us with all the information and documents we require when you apply and if you qualify for benefits, you should receive your first cheque within four weeks.

Who is eligible?

People who have paid into the EI account, and who have worked a minimum number of hours based on the unemployment rate in their region. (See table 1).

Table 1

Unemployment rate	Required number of hours worked in the last 52 weeks
0% to 6%	700 hours
6.1% to 7%	665 hours
7.1% to 8%	630 hours
8.1% to 9%	595 hours
9.1% to 10%	560 hours
10.1% to 11%	525 hours
11.1% to 12%	490 hours
12.1% to 13%	455 hours
13.1% and over	420 hours

Exceptions to the above:

- If you are in the work force for the **first time** you will need a minimum of 910 hours in the last 52 weeks to qualify.
- If you are **re-entering** the work force after an absence of two years you will, in most instances, need a minimum of 910 hours of work.
- Violations from previous EI claims may also increase the number of hours required to qualify for EI benefits.

How long can I receive EI?

People can collect benefits between 14 and 45 weeks depending on the unemployment rate in their region, and how long they have worked. (See table 2).

Table 2

Unemployment rate in claimant's region												
Hours of Work	6% and under	over 6% to 7%	over 7% to 8%	over 8% to 9%	over 9% to 10%	over 10% to 11%	over 11% to 12%	over 12% to 13%	over 13% to 14%	over 14% to 15%	over 15% to 16%	over 16%
420-454									26	28	30	32
455-489								24	26	28	30	32
490-524							23	25	27	29	31	33
525-559						21	23	25	27	29	31	33
560-594					20	22	24	26	28	30	32	34
595-629				18	20	22	24	26	28	30	32	34
630-664			17	19	21	23	25	27	29	31	33	35
665-699		15	17	19	21	23	25	27	29	31	33	35
700-734	14	16	18	20	22	24	26	28	30	32	34	36
735-769	14	16	18	20	22	24	26	28	30	32	34	36
770-804	15	17	19	21	23	25	27	29	31	33	35	37
805-839	15	17	19	21	23	25	27	29	32	33	35	37
840-874	16	18	20	22	24	26	28	30	32	34	36	38
875-909	16	18	20	22	24	26	28	30	32	34	36	38
910-944	17	19	21	23	25	27	29	31	33	35	37	39
945-979	17	19	21	23	25	27	29	31	33	35	37	39
980-1014	18	20	22	24	26	28	30	32	34	36	38	40
1015-1049	18	20	22	24	26	28	30	32	34	36	38	40
1050-1084	19	21	23	25	27	29	31	33	35	37	39	41
1085-1119	19	21	23	25	27	29	31	33	35	37	39	41
1120-1154	20	22	24	26	28	30	32	34	36	38	40	42
1155-1189	20	22	24	26	28	30	32	34	36	38	40	42
1190-1224	21	23	25	27	29	31	33	35	37	39	41	43
1225-1259	21	23	25	27	29	31	33	35	37	39	41	43
1260-1294	22	24	26	28	30	32	34	36	38	40	42	44
1295-1329	22	24	26	28	30	32	34	36	38	40	42	44
1330-1364	23	25	27	29	31	33	35	37	39	41	43	45
1365-1399	23	25	27	29	31	33	35	37	39	41	43	45

Courtesy of Human Resources Development Canada, Employment Insurance Benefits. Reproduced with the permission of the Minister of Public Works and Government Services Canada, 1998.

Oil Price Problem

Look at the newsletter article on the opposite page.



Workers read newsletter articles to receive updates on company policies and future trends in their industry.

Question What was the price of a barrel of oil in 1998?

1

Question If there is too much oil on the market, how is the price affected?

2

Question How are the prices of wheat and sugar similar to the price of oil?

3

Question List three methods that this oil company uses to mitigate, or reduce, the impact of changing world oil prices.

4

Ride the crude price roller coaster

Supply and demand - the driver on the crude price roller coaster. This July, the price of crude oil temporarily touched \$20 per barrel, an event no one would have predicted just a few months ago. The experts were surprised when oil prices remained in the \$12 per barrel range throughout 1998 and are surprised at today's price of \$20 per barrel.

According to economists, the price of any commodity is governed by supply and demand. Too much supply and price comes down; not enough supply and price rises. The unusual aspect of the current oil price is that worldwide inventories are still quite high, having risen due to the prospect of lower inventories with the anticipated OPEC supply curtailment.

So what's ahead?

Will the current price level last? No one knows for sure, so to reduce our company's price risk exposure, we have recently taken an increased hedge position for part of production in 1999, 2000 and 2001.

Are the days of low oil prices over? Not necessarily. OPEC countries like Venezuela have shut in over 0.5 million barrels per day of production. The jury is still out whether this discipline will hold in the future.

A review of all major commodities indicates that in the long run, price will decline. For example, the costs of wheat, sugar, copper and gold are at much lower levels than 20 years ago. The gold mines in Canada are struggling with the sharp decline in price. The successful mines are those that have a rich reserve as well as a cost structure substantially below world price.

The Oil Sands strategy of cost reduction, selective hedging and Project Millennium is designed to mitigate against external crude price risk. This strategy will help keep our seat belts fastened tight for the oil price roller coaster ride.

For a look at current crude oil price, turn to [www. bloomberg.com/energy](http://www.bloomberg.com/energy)

Employment Policy Problem

Look at the page from an employee orientation manual on the page opposite. 

Employees read orientation manuals to learn about company policies and procedures.

Question Highlight, circle, or underline the list of people who provide the information used to appraise employee performance.

1

Mark the orientation manual

Question Samuel started work as a care worker in a group home on January 15. On what date can he expect his probationary period to end?

2

Question Mary is a life skills coach and care worker for Mitch. Last week she didn't show up to take Mitch to the gym as planned. What might Mary's supervisor do to make sure Mary is more conscientious?

3

Question How long is the probationary period?

4

PROBATIONARY PERIOD

AT THE PRESENT TIME THERE IS A SIX MONTH PROBATIONARY PERIOD IN EFFECT FOR ALL POSITIONS. A REVIEW WILL BE CONDUCTED TO DISCUSS ANY CONCERNS THE EMPLOYEE MAY HAVE.

AT THIS TIME IT WILL BE DETERMINED IF THE EMPLOYEE HAS MET THEIR PROBATIONARY OBLIGATIONS.

EMPLOYEE PERFORMANCE APPRAISALS

EMPLOYEE APPRAISALS WILL BE CONDUCTED EVERY YEAR. THIS REVIEW WILL EXAMINE HOW THE EMPLOYMENT IS PROGRESSING AND THE INFORMATION GATHERED WILL BE RECEIVED FROM THE SUPERVISOR OF THE RESIDENCE, THE CLIENT/GUARDIAN, AND THE EMPLOYEE.

THE EMPLOYEE WILL BE REQUIRED TO SIGN THIS REVIEW AND A COPY WILL BE KEPT IN THE EMPLOYEES PERSONNEL FILE FOR FUTURE REFERENCE.

TERMINATION OF SERVICES

RESIGNATION: AN EMPLOYEE WISHING TO RESIGN, SHALL DO SO IN WRITING AND GIVE AT LEAST TWO WEEKS NOTICE. THIS NOTICE MUST BE GIVEN TO THE SUPERVISOR OF THE PROJECT.

DISMISSAL: AN EMPLOYEE MAY BE DISMISSED FOR THE FOLLOWING REASONS:

- FAILURE TO MEET PROBATIONARY REQUIREMENTS
- UNETHICAL CONDUCT
- BREACH OF CONFIDENTIALITY

DISCIPLINE

A CLIENT/GUARDIAN OR RESIDENTIAL SUPERVISOR MAY RECOMMEND DISCIPLINARY PROCEDURES FOR AN EMPLOYEE WHO VIOLATES THE POLICY AND PROCEDURES OF THE PARKLAND C.L.A.S.S. OR FAILS TO MEET COMMITMENTS MADE TO CLIENTS.

DISCIPLINARY PROCEDURES MAY INCLUDE BUT ARE NOT LIMITED TO:

- VERBAL REPRIMAND
- WRITTEN WARNING

ANY WRITTEN DISCIPLINARY ACTIONS TAKEN WITH AN EMPLOYEE ARE KEPT ON RECORD AND FILED IN THE EMPLOYEE'S FILE.

Sample Test

Answers and Discussion

In the following section we provide the answers for the questions in the sample test. We have also tried to point out some key features of TOWES test design and construction in relation to each of the problem sets.

With some humility, we also point out that we do not have ‘all the answers.’ It has been our experience in the past that the ‘correct’ response we intended as we put a test item together has sometimes turned out not to be the best response when we mark the trial tests. Other eyes and other viewpoints often reveal different ways of answering or alternate ‘readings’ of the questions.

Workplace Context

You will notice that each problem set begins with a statement that sets the context:

Nurse Aides in hospitals often bring meals on trays to patients . . .

Allen just got a job bartending at a local hotel . . .

Highway construction workers prepare road beds . . .

Although these occupations are named, the skills needed to do the tasks are not limited to one occupation. The Essential Skills Profiles provide hundreds of examples of common uses of reading text, document use and numeracy. TOWES builds on this research by using actual workplace documents and tasks that mimic how workers use information. The Newsletter Problem has a military context and is typical of ‘trade’ reading for those directly involved and for other interested readers. Industry specific publications are typical of most workplaces. Journals are often left in lunch rooms for all workers, including frontline workers, to read for a greater appreciation of industry trends. The Transformer Selection Problem is specific to an electronic assembly plant, however, the job of ‘picking’ is common to hundreds of other manufacturing settings. The format of this particular

information display requires document use skills that can be transferred to many similar document types in other settings. Anyone who has organized a meeting - either from the customer or worker point of view can relate to the numeracy tasks in the Meeting Room Problem.

These problem sets all have workplace contexts. The actual setting may be unfamiliar to the test-taker, however the validity of doing these tasks becomes obvious to test-takers. Here is what some test-takers have said about taking a TOWES test.

“It wasn’t hard, but you have to be able to read comfortably to the activities.”

“The types of questions asked are relevant to a workplace and make you apply the skills one has in order to get the right answer.”

“It shows that we all have skills regardless of the type of work we do, they are just used in different ways.”

Answers - Meal Tray Problem

- 1. Before handing out trays, what information does the nurse aide need from the registered nurse?*
The nurse aide needs to check if the patient is scheduled for tests or surgery.
- 2. Highlight, underline or circle the words that explain what to do after the nurse aide clears the area where the patient will eat.*
The second procedure should be marked 2. Check the tray for spilled . . .
- 3. Some patients receive special diets. How can the nurse aid be sure the right tray is served?*
The nurse aid must compare the name on the tray with the name on the patient's ID bracelet.
- 4. A patient is unable to use one arm. How can the nurse aide make it easier for him to eat his meal?*
The aide can open milk coartons, cereal boxes, etc. to make it easier for the patient (Procedure 5).

How are test items developed?

The stimulus documents for all TOWES problem sets are taken from actual workplaces during job analysis or occupational profiling. Test items are built around tasks which would naturally arise from using the document.

Workplace reading tasks tend to be 'reading to do' rather than 'reading to learn.' The documents which workers use for these tasks are often complex with information appearing in combined, nested and intersecting lists. For example, in the 'Meal Tray' problem, the test taker must be aware of the 'loosely defined' table structure which comprises the first half of the document. Understanding the information about 'Procedure' and 'Rationale' requires knowledge of how row and column information relate to each other in a combined list.

Some TOWES problem sets are presented on double-width paper which allows us to include test items that use more than one document of multi-page documents. These items force selective reading strategies and demand higher-level search skills. For an example, please see the 'Princess Cruises' problem set on pages 32-35 in this booklet.

SERVING AND REMOVING TRAYS

Procedure:

1. Clear the area where the patient will eat.
2. Check the tray for spilled liquids, missing items, or ordered food that is missing.
3. Compare the name on the tray to the name on patient's identification bracelet.
4. Place the tray so that it faces the patient, and remove the food covers.
5. Open milk cartons and cereal boxes, butter toast, cut up meat, and otherwise assist as necessary.

Rationale:

Q2 Locate the phrase 'clear the area.'

Scan down to find the task that comes 'after.'

Mark the passage.

enjoyable.

Avoid serving the tray to wrong patient.

Q3 Scan for 'right or wrong' in relation to 'tray or patient.'

Infer that serving the wrong patient is the same as serving the wrong tray.

Read the item in the left-hand column to find the procedure to prevent this.

NOTE THE FOLLOWING

Q1 Scan whole page for the search term 'registered nurse' (only one instance so no distractions from the correct answer).

Locate the information about tests and surgery which follows.

the area tidy.

5. Always check with the registered nurse prior to serving. Some patients may be scheduled for surgery or tests.

Answers - TD1 Form Problem

Allan is a full-time student at Bow Valley College. He just got a job tending bar at a local hotel. His new employer wants him to fill out a TD1 form. Allan is single and has no dependants. He will be a full-time student for 8 months in 2001 and will pay \$1,800.00 for tuition fees. He has not received any bursaries or scholarships.

1. Highlight, circle or underline the words that explain why Allan's new employer needs the information on the Personal Tax Credits Return (TD1) form.
"Your employer or payer will use this amount to determine the amount of your payroll deductions." (2 instances of this phrase, both correct)
2. Enter Allan's tuition and education amounts into the correct box on the TD1 form.

Tuition	\$1,800.00
Other expenses \$400.00 x 8 months	\$3,200.00
Total	\$5,000.00
3. Calculate Allan's total claim amount and enter this amount on the form.
 $5,000 + 7,412 = \mathbf{12,412}$

What makes questions easy or difficult?

Specificity of Operation - In question 3, the arithmetical operation of addition is well specified (the tax people want to make it easy to pay taxes). The phrase 'add lines 1 through 11' and the arrangement of the numbers in a column offer the form-filler adequate cues that an addition is required. If the arithmetic is poorly specified, the test item is more difficult.

Distracting Information - Without careful reading, the two categories of 'Tuition and Education' amounts in 4a and 4b can be confused. The form-filler has to use the additional search term 'full time' to identify the correct line.

Type of Match - The match between 'given' information and 'requested' information in question 2 requires no inference, the match is 'literal' or exact. However, the use of two search terms to locate the correct line ('full time' and 'education amount') raises the difficulty level.



Complete this TD1 form if you have a new employer or payer and you will receive salary, wages, commissions, pensions, Employment Insurance benefits, or any other remuneration. Be sure to sign and date it on the back page and give it to your employer or payer who will use it to determine the amount of your payroll tax deductions.

If you do not complete a TD1 form, your new employer or payer will deduct taxes after allowing the basic personal amount only.

You do not have to complete a new TD1 form every year unless there is a change in your personal tax credit amounts. Complete a new TD1 form no later than seven days after the change.

Visit our website at www.ccr-aadrc.gc.ca or by calling 1-800-959-2221.

Q1 Scan for 'use of form' or 'purpose of form'

Locate 'use' and 'employer' in two separate sections. Both instances are acceptable answers.

Date of birth (YYYY/MM/DD)	Employee number
Non-residents only - Country of permanent residence	Social insurance number

If you will have more than one employer or on the back page. If you are a non-resident,	\$7,412
---	----------------

<p>2. Age amount - If you will be 65 or older on December 31, 2001, and your net income for the year will be \$26,941 or less, enter \$3,619. If your net income will be between \$26,941 and \$51,068 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return (TD1-WS)</i> and complete the appropriate section.</p> <p>3. Pension income amount - If you will receive regular pension payments from a pension plan or fund (excluding Canada or Quebec Pension Plans (CPP/QPP), Old Age Security and guaranteed income supplements), enter \$1,000 or your estimated annual pension income, whichever is less.</p> <p>4a. Tuition and education amounts (full-time) - If you are a student enrolled full-time at a university, college, or educational institution certified by Human Resources Development Canada, enter the total of the tuition fees you will pay, if more than \$100 per institution, plus \$400 for each month that you will be enrolled full-time.</p> <p>4b. Tuition and education amounts (part-time) - If you are a student enrolled part-time at a university, college, or educational institution certified by Human Resources Development Canada, enter the total of the tuition fees you will pay, if more than \$100 per institution, plus \$120 for each month that you will be enrolled part-time.</p> <p>5. Disability amount - If you will claim a <i>Credit Certificate</i>, enter \$6,000.</p> <p>6. Spousal amount - If you are supporting a spouse or common-law partner whose net income for the year will be \$629 or less, and you want to calculate a partial claim, complete the appropriate section.</p> <p>7. Equivalent-to-spouse amount - If you are supporting a relative who lives with you, and his or her net income for the year will be between \$629 and \$11,953, complete the appropriate section.</p> <p>8. Caregiver amount - If you are supporting a dependent who lives with you, and who is either: <ul style="list-style-type: none"> parent or grandparent age 65 or older relative age 18 or older who is dependent enter \$3,500. If the dependant's net income for the year will be between \$4,966 and \$8,466 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return (TD1-VWS)</i> and complete the appropriate section.</p> <p>9. Amount for infirm dependant age 18 or older - If you are supporting an infirm dependant age 18 or older who is your or your spouse's or common-law partner's relative, who lives in Canada, and his or her net income for the year will be \$4,966 or less, enter \$3,500. You cannot claim an amount for a dependant claimed on line 8. If the dependant's net income for the year will be between \$4,966 and \$8,466 and you want to calculate a partial claim, get the <i>Worksheet for the 2001 Personal Tax Credits Return (TD1-WS)</i> and complete the appropriate section.</p> <p>10. Amounts transferred from your spouse or common-law partner - If your spouse or common-law partner will not use all of his or her age amount, pension income amount, tuition and education amounts (maximum \$5,000), or disability amount on his or her income tax return, enter the unused part.</p> <p>11. Amounts transferred from your dependant - If your dependant will not use all of his or her tuition and education amounts (maximum \$5,000) or disability amount on his or her income tax return, enter the unused part.</p>	<p>Q3 Locate instructions to 'add lines 1 through 11'</p> <p>Perform addition</p> <p>In order to 'disconnect' this question from the previous one, mark it correct if the two amounts in line 1 and 4a are added correctly - even if the tuition and education amount has been miscalculated or is on the wrong line.</p>	<p>Tax</p> <p>923</p> <p>ome</p> <p>a</p>
---	--	---

<p>12. TOTAL CLAIM AMOUNT - Add lines 1 through line 11. Your employer or payer will use this amount to determine the amount of your payroll tax deductions.</p>	\$ 12,412
---	------------------

Form continues on the back

Answers - Road Construction Problem

1. *How much lower will the roadbed be at the end of the 85.4 metre section shown in the plan than it was at the start?*

$$82.518 - 81.664 = \mathbf{.854 \text{ metres}}$$

2. *The existing ground elevation at the fifth station (0+60) is at 81.639 metres. What depth of fill does the excavator need to add to raise it to finished grade?*

$$81.918 - 81.639 = \mathbf{.279 \text{ metres}}$$

3. *A later section of the highway is to be constructed at a 3.4% uphill grade.*

- a. *Over a distance of 100 metres how much will the highway rise?*

$$100 \times .034 = \mathbf{3.4 \text{ metres}}$$

- b. *The finished road elevation at the beginning of a 120 metre section is 42.518 metres. What should the elevation be at the end of the section if the uphill grade is 3.4%?*

$$42.518 + (120 \times .034) = \mathbf{46.598}$$

Does TOWES test mathematics?

This problem set, like most TOWES items, tests skills in more than one domain. The numeracy dimension of these questions involves some ‘mathematical operations,’ but a significant portion of the complexity in the first two questions comes from the need to search for information in a rather complex and unfamiliar document. This makes ‘numeracy’ a wider skill than merely knowing how to carry out isolated arithmetic ‘operations.’ In the workplace, the numbers needed to carry out a calculation are seldom ‘given.’ Workers need to navigate documents, take measurements, and make inferences to arrive at the correct values for any calculation. The actual arithmetic, like the addition and subtraction of decimals in the first two questions, is fairly straightforward.

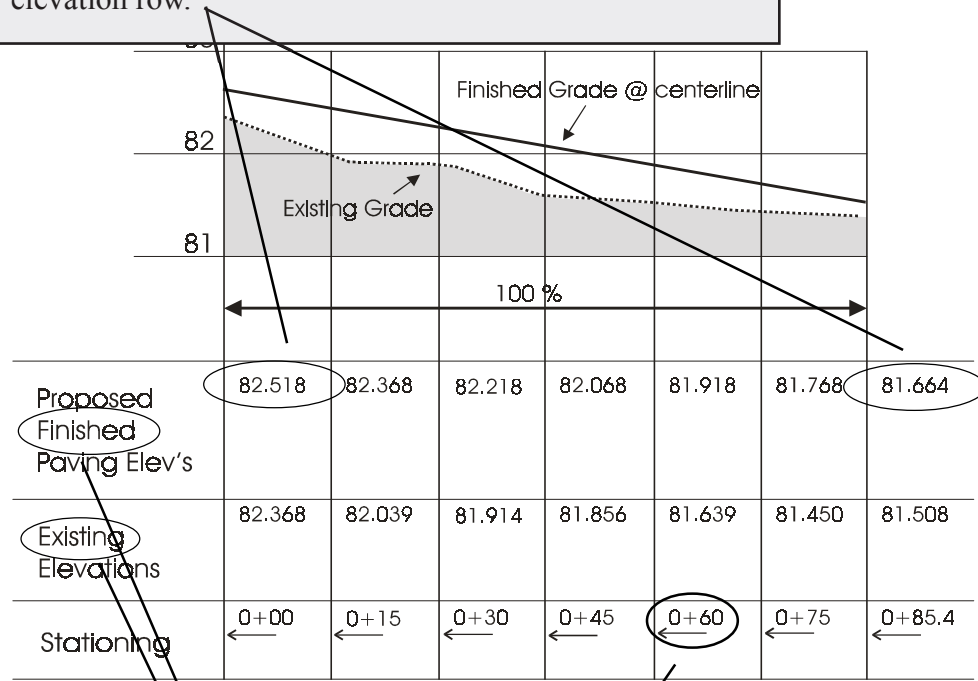
Questions 3a and 3b ask the test taker to generalize the principle of ‘slopes’ illustrated in the first two questions. While the workplace context may be unfamiliar, test takers should be able to transfer knowledge and skills from other similar applications.

Q1 Starting elevation - ending elevation = distance lower

Match 'finished elevation' in the question to the same term in the elevations table. It's a literal match between given and requested information.

Infer that the '0' and '85.4' in the 'Stationing' row are the start and finish of the slope. The same information can be found using the drawing above the table.

Locate elevations 82.518 and 81.664 in the 'finished' elevation row.



Project: Roadworks - Thorncliffe Drive

Drawing 1 of 1

Drawn by: BT

Design: BT

Note: All measurements in metres

Q2 Existing elevation + fill = finished elevation, or finished - existing = fill.

Match 0 + 60 in the question with the same term on the table.

Match the 'finished' and 'existing' row headings.

Locate elevations 81.918 and 81.639.

Answers - Transformer Problem

1. *What feature of the transformer is indicated by an 'A' as the third element in the part number?*

The A indicates a **117 VAC, 60 Hz input**

2. *What are the first two numbers in the part number of a transformer with a power rating of 300 VA (volt-amp)?*

07 indicates a 300 VA rating

3. *Build the part number for a PLITRON toroidal transformer with the following specifications: 1000 VA; 115/230 Volts AC input; 50/50 Volt output; centre potted and drilled; thermal protection by resetting switch; 350 mm stranded wire lead outs.*

1 1 7 _ 3 3 2 1 1 (The fourth element was not specified and is not marked.
The 'default' selection would be '0' - no screen or shield)

Why does TOWES use 'constructed response' type questions?

Constructed response items, such as the creation of this Plitron part number, are more difficult to mark than other types of exam questions, but yield far more psychometric information (which is the reason for testing).

For many years the 'gold standard' for test items has been the multiple choice format. Proponents of multiple choice items correctly point out that this type of question discriminates well and is easy to mark. On the other hand, the emphasis on the actual question in a multiple choice item means that these items are fundamentally tests of reading and test-taking skills.

Constructed response items yield more information from incorrect responses and allow a wider range of possible answers. For example, during trials, we may find that less-skilled individuals do not fill in the fourth item in question 3, while better skilled individuals insert a '0' as the default value. In this case, we could modify how this item was marked to make use of this added 'information' about the skill of test-takers.

We use constructed response items because we respect the test-taker and value the time he or she has taken to write the test. The time we take to mark the test is well-spent if we can get comprehensive and accurate information about literacy and numeracy skills from the test results.

Building a PLITRON order number

CODE	Pwr. VA	Reg. %
00	15	20
01	30	18
02	50	13
03	80	12
04	120	11
05	160	8
06	225	7
07	300	6
75	400	5
08	500	4
09	625	4
10	750	4
11	1000	4
12	1500	4

CODE	Volts AC	Freq. Hz
7	115/230	50/60
A*	117	60
5*	100/120/220/240	50/60

CODE	Options
0	None
1*	Electrostatic S
2*	Magnetic Sh
3*	Both Screen &

CODE	Wire Lead-out
(both stripped 6m)	
Stranded, 350m	
Magnet Wire, 200	

The selection chart is an aid to building a PLITRON part number. In this example, part number 087026201, describes a

Q1

Use the search term 'third position' and trace the line to **locate** the small chart for the third position

Cycle to find the 'A' in the first column of the chart; find its meaning in the second column of the same row.

0 8 7 0 2 6 2 0 1

CODE	Output (VAC RMS)		Availability
	Sec1	Sec2	
10	6	6	15 to 50VA
11	9	9	15 to 120VA
12	12	12	15 to 225VA
13	15	15	15 to 300VA
14	18	18	"
27	20	20	15 to 400VA
15	22	22	"
60	24	24	15 to 750VA
16	25	25	15 to 1000VA
17	30	30	"
41	31	31	"
19	33	33	"
18	35	35	"
35	38	38	All models
26	40	40	"
25	45	45	"
33	50	50	"
42	55	55	"
52	60	60	"
28	110	—	"
50	117	—	"
29	220	—	"
30	240	—	"
53	175	175	50 to 1500VA

CODE	Thermal Protection Options
0	None
1*	Resetting Switch
2*	One Shot Fuse

CODE	Mounting
2	Potted Center, drilled
1*	None
0*	Metal Disk, 2 Neo washers Bolt, Nut & Flat washer



Courtesy PLITRON Manufacturing Inc., Toronto, Ontario.

Answers - Meeting Room Problem

1. *What is the maximum number of people that can be seated in Boardroom style at the Blue Bay Hotel?*
44 people maximum in the Cypress Room
2. *You want to place tables along a wall to hold books for display. How many 8-foot-long tables will fit along the longest wall of the Fraser Room?*
3 tables (3 x 8 =24 feet along a 28 foot wall)
3. *Cost increases with room size so you want to book the smallest room that will hold your people. Which room and what room layout would be best for showing a video to a group of 15 people?*
The **Fraser room** will seat 30 people **theatre style** and is the smallest room.
4. *How many tables will be needed to seat 70 people in a room arranged in Classroom style?*
At 5 people per table, it will take **14 tables** to seat 70 people.

Why test the use of Imperial measuring units?

The short answer is because we need to or are asked to; we have no ideological position on the issue of measuring systems. While Canada officially switched to the System International (metric) many years ago, Canadians are just as likely to use pounds and feet as kilograms and metres for measurement tasks at work. Recent research conducted by HRSDC shows that there are few workplaces where Imperial measures are not used, or where SI measures are used exclusively. Air freight is billed out to the customer in kilograms, and then loaded onto aircraft in pounds; natural gas is measured in cubic feet when it is on the ground and in gigajoules when it reaches the consumer.

In versions of TOWES that are custom-designed for particular workplaces or particular occupations, measurement units in the test items are matched to those found at work. TOWES is designed to test the literacy skills actually used at work and each test is matched to the application using a careful analysis of on-the-job requirements.

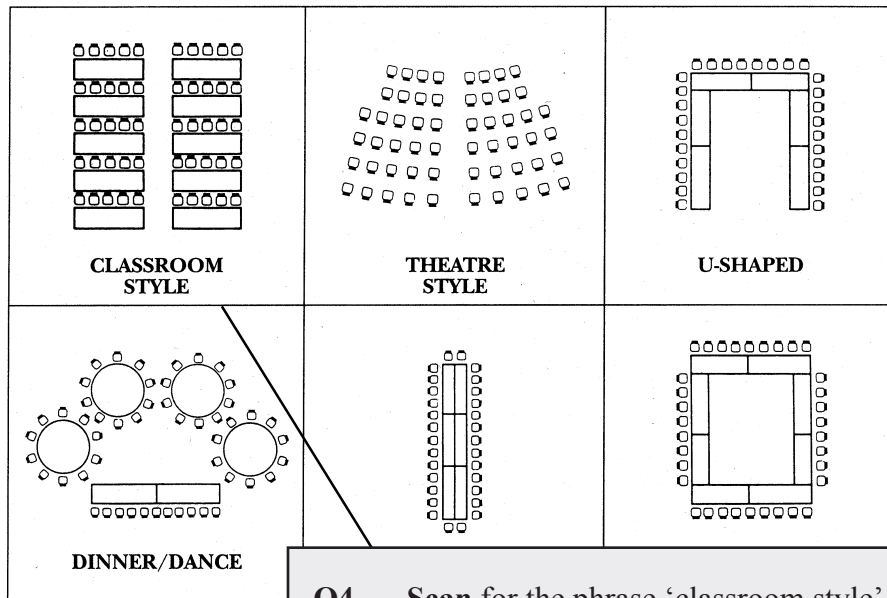
C A P A C I T I E S & L A Y O U T

Q1 Finding a 'maximum' requires an exhaustive search of this table. The test-taker must scan all rooms and layouts to locate the largest number.

Room	Reception Style	Theatre Style	Boardroom	Hollow Square	U-Shape	Classroom	Rounds	Dinner Dance	Square Footage	Dimensions
Cypress	200	150	44	44	34	70	80	60	1320	30 x 44
Terrace	40	40	18	20	16	24	32	N/A	462	21 x 22
Fraser	30	30	16	16	14	12	24	N/A	392	14 x 28

Room Layouts

The following layouts shown are the most commonly used for meetings and banquets. However, we will be pleased to assist or make other recommendations, should you require a special layout tailored towards your presentation or function.



Q4 Scan for the phrase 'classroom style' in the picture list of room layouts.

Extract the information 'five seats to a table' from the associated drawing.

Calculate the number of tables given 5 people per table and 70 people total.

Answers - Newsletter Problem

1. *What was the subject of the presentations and demonstrations at this meeting?*
Landmine detection equipment
2. *Highlight, underline or circle the words in the article that identify the equipment shown in photographs A and B.*
Smart Probe should be marked.
3. *How does the Smart Probe distinguish between rocks and mines?*
It sends an ultrasonic pulse or sound. The echo is digitized and processed to identify whatever is contacted
4. *What feature of newer landmines makes detecting them difficult?*
New mines are **low metal content or contain no metal** (mentioned two times)

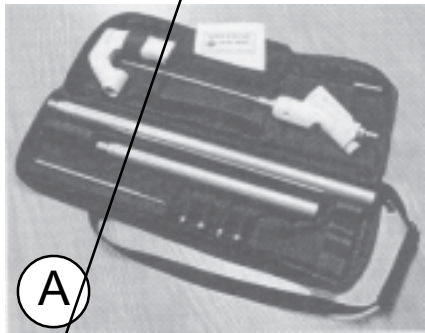
Testing reading and document use skills at several levels.

TOWES items are developed to ‘probe’ reading skills at all levels. Surprisingly, it is easier to write questions that test reading at a higher level than to write questions that test reading at a more fundamental level. Test items follow from an accurate description of the complexity of document and reading tasks using the five point scale developed for the International Adult Literacy Survey. In recent years, health and safety requirements, new processes, and new technology have driven the requirements for reading in most jobs. Increased reading demand is closely associated with increasing job responsibilities. We are also aware that the same document can be read and used for several purposes each of which demands different kinds of reading skills; there is a significant difference between checking a form to see that a reason has been given and deciding whether the reason given is adequate.

The questions in this problem set are clearly more demanding than the questions in the ‘Meal Tray’ problem. However, the type of information being requested is fairly concrete and this limits the complexity. A more demanding question might ask about the similarities in the methods for detecting nonmetallic landmines.

The next day the Group DRES for further presentations by US and Canada involved in detection and mines. The US NATO requested a presentation on two hand detectors currently being the US DoD for detecting metallic mines. The two US firms the products are Coleman Corporation with a modified AN-19/2 Mine Detecting set with a Drop-In Ground Penetrating Radar System (DIGS) and GDE Systems Ground Penetrating Radar using a balanced bridge sensor. Later in the day, the participants were given the opportunity to see these products in actual scenarios and to try out the machines themselves.

DEW Engineering, Ottawa, Ontario



provided an interesting presentation and demonstration of the newly developed "Smart Probe." This instrumented probe, developed by DRES and manufactured and distributed by DEW Engineering, once in contact with a "target" sends an interrogating ultrasonic pulse down the needle. The return echo is digitized and processed to identify the material contacted. As a result mines can be distinguished from rocks, for example, without excavation.

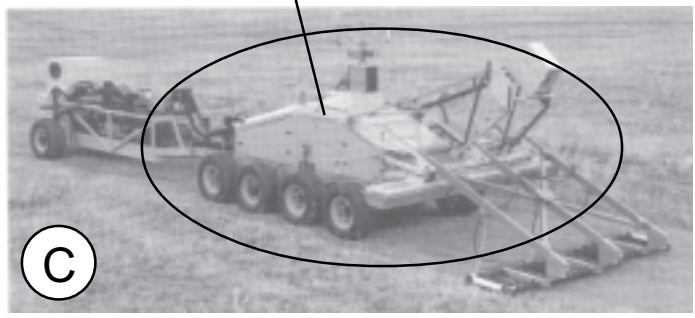
Q2 Identify the similarities between photo A and B. **Recognize** A as a packed version of B. The 'probing' action shown in B hints at the name of the object.

Infer that this device is better described as a 'probe' than 'penetrating radar.' The latter is a reasonable 'distractor' and will be chosen by individuals with less developed reading skills.

Contrast 'probe' with 'vehicle mounted' and infer that the second term better describes the device in photo C.



Once the presentation and demonstrations of the more conventional modes of detection were completed, the Group turned their attention to the Improved Landmine Detector Project underway in DRES and in conjunction with Computing Devices Canada Ltd. This project is developing a teleoperated multi-sensor vehicle-mounted mine detector for low metal content and nonmetallic mines for a peacekeeping role on roads and tracks.



Answers - Princess Cruises

Problem

1. *List five recreational facilities offered on this cruise ship.*
Any five of: **swimming pools, spa, sauna, casino, fitness centre, paddle tennis court.**
2. *On the fares chart, indicate which is the least expensive type of accommodation offered on the Atlantic Deck.*
Either **‘Stateroom Category II’, ‘Inside - one double bed ATLANTIC’ OR ‘\$2754’** should be marked.
3. *An elderly couple want to take a 12-day cruise. They prefer to be on the highest deck that has an outside stateroom (not a suite). They want to have a double bed. Because they can’t walk far, they need to be close to the elevators (lifts). Indicate the most appropriate stateroom on the deckplan.*
Stateroom # 51 on the Promenade Deck should be marked.

The use of fold-out pages and directional arrows.

Look to the page opposite arrow

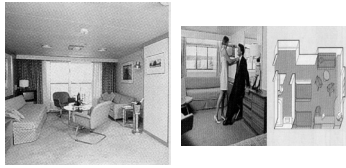
In all TOWES problem sets, there is an arrow at the top of the page showing the test taker where to look for the corresponding document. Given the nature of the test - the use of workplace documents and corresponding questions, it is important that the layout of the test be as clear as possible for the test takers. The difficulty should be in the questions and documents, not the layout of the test.

“Fold this page out” arrow



Fold this page out

Generally, TOWES tests contain between one and three fold-out pages. The main reason for this is that the workplace document and/or questions do not fit in the usual 2-page spread layout. Instead we use 11X17 paper so that we can display the entire problem set and maintain the integrity of the questions. It is important during test administration to clearly communicate the nature of fold out pages to test takers. Sometimes, only the workplace document is on the fold-out page, but other times there may be questions there as well. If you clearly explain how the fold-out pages work, this increases the likelihood that test takers will attempt the questions on the fold-out pages, and that they will not lose marks unnecessarily.

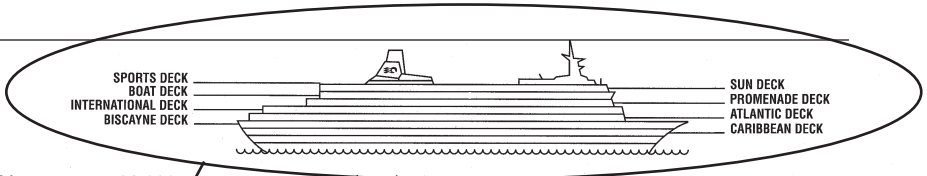


**Suite with Private Balcony
(categories AA & A)**

Private bedroom with double bed or twin beds.
Sitting room area and private balcony
for entertaining. TV. Refrigerator.
Bath with tub and shower.

**Mini-Suite
(categories BB & B)**

Picture window with sitting area for entertaining.
Two lower beds. Bath with tub/shower.
TV and refrigerator.



830 passengers. 28,000 gross tons. 674 ft. in length. Two swimming pools. Spa. Sauna. Casino. Fitness Center. Paddle tennis court. Beauty salon. Boutiques. Spacious staterooms. Bahamian registered.

Q3 Locate the accommodations table. Recognize that Stateroom categories CC-H are outside staterooms.

Locate the boat deck diagram. Recognize that the Promenade deck is the highest deck that has outside staterooms in the accommodations table. The Stateroom Category is therefore CC or C.

Recognize that (•) means that the staterooms may be available with one double bed. Stateroom Category C has this symbol.

Turn to the Deckplan diagrams. Locate the Promenade deck.

Locate (•) on room 51. Infer that this room is available with one single bed.

Recognize that room 51 is also near a lift. Therefore room 51 satisfies all of the couples' requirements.

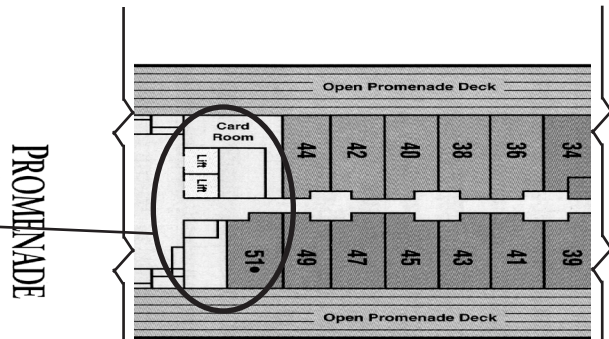
Stateroom Category	ACCOMMODATIONS	CRUISE-ONLY FARES			
		Value May 29, Sep 2	12-DAY Standard Jun 10, Aug 21	Peak Jun 22- Aug 9	10-DAY Value May 19, Sep 14
		COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4
AA •	Outside suite with private balcony. SUN	\$5,949	\$6,049	\$6,149	\$5,369
A •	Outside suite with private balcony. SUN	\$5,199	\$5,299	\$5,399	\$4,619
BB	Outside mini-suite. PROMENADE	\$4,699	\$4,799	\$4,899	\$4,119
B	Outside mini-suite. PROMENADE, ATLANTIC	\$4,599	\$4,699	\$4,799	\$4,034
CC •	Outside deluxe - two lower beds. PROMENADE	\$4,349	\$4,449	\$4,549	\$3,834
C •	Outside deluxe - two lower beds. PROMENADE	\$4,249	\$4,349	\$4,449	\$3,749
D	Outside deluxe - two lower beds. ATLANTIC	\$4,149	\$4,249	\$4,349	\$3,664
FF •	Outside - two lower beds. ATLANTIC	\$3,799	\$3,899	\$3,999	\$3,364
F •	Outside - two lower beds. ATLANTIC	\$3,699	\$3,799	\$3,899	\$3,279
GG •	Outside - two lower beds. BISCAYNE	\$3,599	\$3,699	\$3,799	\$3,194
G •	Outside - two lower beds. BISCAYNE	\$3,499	\$3,599	\$3,699	\$3,109
HH •	Outside - two lower beds. CARIBBEAN	\$3,399	\$3,499	\$3,599	\$3,024
H •	Outside - two lower beds. CARIBBEAN	\$3,299	\$3,399	\$3,499	\$2,939
II	Inside - one double bed. ATLANTIC	\$3,099	\$3,199	\$3,299	\$2,754
I •	Inside - two lower beds. BISCAYNE	\$2,999	\$3,099	\$3,199	\$2,669
J •	Inside - two lower beds. CARIBBEAN	\$2,899	\$2,999	\$3,099	\$2,584
K •	Inside - two lower beds. BISCAYNE, CARIBBEAN	\$2,799	\$2,899	\$2,999	\$2,499
	3rd/4th person in stateroom (adult/child)	50%	50%	50%	50%
	Port/Government Fees: 12-Day Cruises	\$ 152	\$ 152	\$ 152	
	10-Day Cruises				\$ 127

CRUISE FARES (Columns 1-4) Fares are per person, U.S. dollars, based on double occupancy. 3rd/4th person fare is 50% of the above rate and is eligible for 50% of the applicable Love Boat Savers discount.

SINGLE OCCUPANCY FARES For categories AA through D: 200% of full tariff. For categories FF through K: 160% of full tariff. (Single fares are eligible for Love Boat Savers discount).

*Some staterooms in this category will accommodate a third and/or fourth person.

*Some staterooms in these categories may have cabins with one double bed.



Taken from the 'Promenade' diagram inside the fold-out page (see pages 31-32).

Answers - Employment Insurance Problem

- 1. A hospital worker applied for EI benefits the day after she was laid off from her job. If everything is in order, when can she expect her first cheque?*
Within four (4) weeks
- 2. Paul's first job was part time for a theatre company. He worked a total of 700 hours in his first year. Does he qualify for EI benefits?*
No OR must have 910 hours
- 3. Morgan has just been laid off from his first job. What must he take with him when he goes to apply for employment insurance benefits?*
**1. Social Insurance Number (SIN)
2. Record of Employment (ROE)**
- 4. Kaspar, an assembly worker, worked 40 hours a week for the last 33 weeks. The unemployment rate in his city, Winnipeg, was 5.8% this month. How many weeks of EI benefit payments can he expect if he doesn't find another job?*
22 weeks

What if a test taker has never used a document from this industry before?

TOWES uses authentic workplace documents to test the basic skills that people need at work: reading, document use, and numeracy. All of the documents have been collected from real companies from across North America. Many of them come from specific industries, including Oil and Gas, Animal Health Sciences, and Agriculture to name a few. Though workers in these industries often do need technical training, Essential Skills measure one's basic skills at the levels required to learn and complete workplace tasks. The questions in a TOWES test are not technical questions, and do not require previous technical knowledge or experience. All of the information required to answer TOWES questions is embedded within the corresponding workplace document, and assess one's ability to extract and interpret that information.

It is important for test takers to understand that the answers can all be found within the workplace documents. Though the technical documents may be intimidating at first, they should be reassured that they probably have enough general ability to use their Essential Skills to complete the questions.

Regular benefits

Regular benefits are paid to people who are available for and able to work but who can't find a job. You must be in Canada in order to receive regular bene-

Where to apply?

At any Government of Canada, Employment Insurance office.

When to apply?

Fill out an Employment Insurance application as soon as you are out of work. You will need two pieces of information:

- your Social Insurance Number (SIN)
- your Record of Employment (ROE)

When to expect your first cheque?

If you provide us with all the information and documents we require when you apply and if you qualify for benefits, you should receive your first cheque within four weeks.

Who is eligible?

People who have paid into the EI account, and who have worked a minimum number of hours based on the unemployment rate in their region. (See table 1).

Table 1

Unemployment rate	Required number of hours worked in the last 52 weeks
0% to 6%	700 hours
6.1% to 7%	665 hours
7.1% to 8%	630 hours
8.1% to 9%	595 hours
9.1% to 10%	560 hours
10.1% to 11%	525 hours
11.1% to 12%	490 hours
12.1% to 13%	455 hours
13.1% and over	420 hours

Exceptions to the above:

- If you are in the work force for the **first time** you will need a minimum of 910 hours in the last 52 weeks to qualify.
- If you are **re-entering** the work force after an absence of two years you will, in most instances, need a minimum of 910 hours of work.
- Violations from previous EI claims may also increase the number of hours required to qualify for EI benefits.

How long can I receive EI?

People can collect benefits between 14 and 45 weeks depending on the unemployment rate in their region, and how long they have worked. (See table 2).

Table 2

Unemployment rate in claimant's region													
Hours of Work	6% and under	over 6% to 7%	over 7% to 8%	over 8% to 9%	over 9% to 10%	over 10% to 11%	over 11% to 12%	over 12% to 13%	over 13% to 14%	over 14% to 15%	over 15% to 16%	over 16%	over 16%
420-454								24	26	28	30	32	
455-489								25	26	28	30	32	
490-524							23	25	27	29	31	33	
525-559						21	23	25	27	29	31	33	
560-594					20	22	24	26	28	30	32	34	
595-629				18	20	22	24	26	28	30	32	34	
630-664			17	19	21	23	25	27	29	31	33	35	
665-699		15	17	19	21	23	25	27	29	31	33	35	
700-734	14	16	18	20	22	24	26	28	30	32	34	36	
735-769	14	16	18	20	22	24	26	28	30	32	34	36	
770-804	15	17	19	21	23	25	27	29	31	33	35	37	
805-839	15	17	19	21	23	25	27	29	32	33	35	37	
840-874	16	18	20	22	24	26	28	30	32	34	36	38	
875-909	16	18	20	22	24	26	28	30	32	34	36	38	
910-944	17	19	21	23	25	27	29	31	33	35	37	39	
945-979	17	19	21	23	25	27	29	31	33	35	37	39	
980-1014	18	20	22	24	26	28	30	32	34	36	38	40	
1015-1049	18	20	22	24	26	28	30	32	34	36	38	40	
1050-1084	19	21	23	25	27	29	31	33	35	37	39	41	
1085-1119	19	21	23	25	27	29	31	33	35	37	39	41	
1120-1154	20	22	24	26	28	30	32	34	36	38	40	42	
1155-1189	20	22	24	26	28	30	32	34	36	38	40	42	
1190-1224	21	23	25	27	29	31	33	35	37	39	41	43	
1225-1259	21	23	25	27	29	31	33	35	37	39	41	43	
1260-1294	22	24	26	28	30	32	34	36	38	40	42	44	
1295-1329	22	24	26	28	30	32	34	36	38	40	42	44	
1330-1364	23	25	27	29	31	33	35	37	39	41	43	45	
1365-1399	23	25	27	29	31	33	35	37	39	41	43	45	

Q4 Infer that EI benefits are calculated based on Hours of Work
Calculate Kaspar's Hours of Work: 40 hours /week X 33 weeks = 1320 hours
Locate 1320 in the 'Hours of Work' column in Table 2
Scan Table 2 for the Unemployment Rate of 5.8% in Kaspar's region
Locate 22 at the intersection between '1295-1329 Hours of Work' and '6% and under Unemployment Rate'
Infer that 22 is the number of weeks of EI payments for which Kaspar is eligible.

Courtesy of Human Resources Development Canada, Employment Insurance Benefits. Reproduced with the permission of the Minister of Public Works and Government Services Canada, 1998.

Answers - Oil Price Problem

1. *What was the price of a barrel of oil in 1998?*
\$12 (range)
2. *If there is too much oil on the market, how is the price affected?*
price comes down OR decline OR goes down
3. *How are the prices of wheat and sugar similar to the price of oil?*
prices are at **lower levels** than 20 years ago OR in the long run **prices will decline**
4. *List three methods that this oil company uses to mitigate, or reduce, the impact of changing world oil prices.*
 1. **Cost Reduction**
 2. **Selective Hedging**
 3. **Project Millennium**

Why is it important that test takers try every question?

TOWES is hand marked twice, by two different trained and certified TOWES test markers. Test takers do NOT lose marks for incorrect answers; they just don't gain a mark. As the test is hand marked, test takers should put something down for every question, as they are more likely to receive a higher score.

Each question in a TOWES test measures a different Essential Skill domain (reading text, document use and numeracy), at a complexity level ranging from 1-5. If test takers do not answer enough questions within each domain and at each level, there may not be enough information to accurately calculate results. If a test taker does not respond to at least 70% of test items, the score will include an asterisk (*), which means that the results may not be an accurate reflection of the test taker's ability. If less than 50% of the items in a certain domain are not answered, no score will be reported, and an N/A - not applicable, will appear on the results report. This means that there was not enough information to score on.

It is important for TOWES test takers to understand that they should attempt every question. If a test taker absolutely cannot answer a question or problem set, they may draw a line through the question.

Ride the crude price roller coaster

Supply and demand
July, the price of crude oil
no one would have predicted
surprised when oil prices
1998 and are surprised

According to economic theory
ply and demand. Too much
supply and price rise
worldwide inventories
of lower inventories

So what's ahead?

Will the current price
company's price risk
creased hedge position

Are the days of low oil prices
Venezuela have shut down
jury is still out whether this discipline will hold in the future.

Q3 Scan for key words 'wheat and sugar' and 'price.'

Locate 'A review of all major commodities indicates that in the long run, price will decline. For example.....than 20 years ago.'

Infer that oil is a part of 'all major commodities.'

Decide that 'prices are at much lower levels than 20 years ago' and 'in the long run, price will decline' are both correct answers.

Q4 Scan for key words 'mitigate', 'reduce', and 'impact of changing oil prices.'

Locate 'Oil Sands strategy....mitigate against external crude price risk.'

Infer that 'Oil Sands' is the the oil company in this document.

A review of all major commodities indicates that in the long run, price will decline. For example, the costs of wheat, sugar, copper and gold are at much lower levels than 20 years ago. The gold mines in Canada are struggling with the sharp decline in price. The successful mines are those that have a rich reserve as well as a cost structure substantially below world price.

The Oil Sands strategy of cost reduction, selective hedging and Project Millennium is designed to mitigate against external crude price risk. This strategy will help keep our seat belts fastened tight for the oil price roller coaster ride.

For a look at current crude oil price, turn to www.bloomberg.com/energy

Answers - Employment Policy Problem

- 1. Highlight, circle or underline the list of people who provide the information used to appraise employee performance.*
Mark Supervisor of the Residence, the Client/Guardian, and the Employee
- 2. Samuel started work as a care worker in a group home on January 15. On what date can he expect his probationary period to end?*
July 15 OR July 16
- 3. Mary is a life skills coach and care worker for Mitch. Last week she didn't show up to take Mitch to the gym as planned. What might Mary's supervisor do to make sure Mary is more conscientious?*
Recommend disciplinary action OR verbal reprimand OR written warning
- 4. How long is the probationary period?*
6 months

TOWES Confidentiality

Client Information - Questionnaire

All information related to TOWES, including test booklets, documentation and results reports, is kept highly confidential in accordance with the Freedom of Information and Privacy Act (FOIP). The information collected with the TOWES questionnaire is never associated with the test taker directly; TOWES processes information collected by booklet numbers. Questionnaires are an important part of TOWES psychometric research, and you should encourage all test takers to fully complete the questionnaire.

Confidentiality and Test Administration

It is crucial that all parts of the testing process remain secure and confidential. Tests and all related documentation, including Test Site Records, must always be kept in a secure location. Booklets should be sent only by courier, NOT regular mail. This ensures that the tests and documentation can be tracked at all stages of the shipping process. If test booklets are being stored at your location, be sure that they are kept in a locked cabinet to which only authorized TOWES test administrators have access. This protects TOWES copyright information and intellectual property, as well as our clients and test takers.

PROBATIONARY PERIOD

AT THE PRESENT TIME THERE IS A SIX MONTH PROBATIONARY PERIOD IN EFFECT FOR ALL POSITIONS. A REVIEW WILL BE CONDUCTED TO DISCUSS ANY CONCERNS THE EMPLOYEE MAY HAVE.

Q2 **Scan** for key words ‘probationary period’ and ‘end.’

Locate ‘six month probationary period.’

Infer that you will have to calculate the date that is six months after January 15. January is the first month in the year.

Calculate: $1 + 6 = 7$. July is the seventh month in the year.

Recognize that the probationary period ends after July 15th.

TERMINATION OF SERVICES

Q3 **Locate** ‘Discipline’ heading.

Infer that not showing up to work falls under the ‘Discipline’ category.

Read the Discipline section to find that a supervisor may ‘recommend disciplinary procedures’ and that ‘disciplinary procedures may include -verbal reprimand and -written warning’

-BREACH OF CONFIDENTIALITY

DISCIPLINE

A CLIENT/GUARDIAN OR RESIDENTIAL SUPERVISOR MAY RECOMMEND DISCIPLINARY PROCEDURES FOR AN EMPLOYEE WHO VIOLATES THE POLICY AND PROCEDURES OF THE PARKLAND C.L.A.S.S. OR FAILS TO MEET COMMITMENTS MADE TO CLIENTS.

DISCIPLINARY PROCEDURES MAY INCLUDE BUT ARE NOT LIMITED TO:

- VERBAL REPRIMAND
- WRITTEN WARNING

ANY WRITTEN DISCIPLINARY ACTIONS TAKEN WITH AN EMPLOYEE ARE KEPT ON RECORD AND FILED IN THE EMPLOYEE’S FILE.

Blank Page