## Advanced <br> Complete <br> MathSmart

## Section 1:

## Basic Problem-solving Questions

Unit 1 Addition ..... 8
Unit 2 Subtraction ..... 16
Unit 3 Multiplication ..... 24
Unit 4 Division ..... 32
Unit 5 Fractions ..... 40
Unit 6 Decimals ..... 48
Unit 7 Money ..... 56
Unit 8 Time ..... 64
Unit 9 Perimeter and Area ..... 72
Unit 10 Shapes and Solids ..... 80
Unit 11 Locations and Movements ..... 88
Unit 12 Patterning and Equations ..... 96
Unit 13 Data Management and Probability ..... 104

## Hontincs

## Section 2:

## Critical-thinking Questions

## Level 1 - with hints

Unit 1 ..... 114
Unit 2 ..... 122
Unit 3 ..... 130
Unit 4 ..... 138
Unit 5 ..... 146
Level 2 - without hints
Unit 6 ..... 154
Unit 7 ..... 162
Unit 8 ..... 170
Unit 9 ..... 178
Unit 10 ..... 186
Answers ..... 195

## Decimals

solving a variety of word problems that involve addition and subtraction of decimals to 1 decimal place

Math Skills
(1)

(2)

(3)


| $x$ | $x$ |
| :---: | :---: |
| $x$ | $x$ |
| $x$ | $x$ |
|  |  |
|  |  |

$0.4+0.8=$ $\qquad$
(4)
(5)

|  |  |
| :---: | :---: |
|  |  |
| $X$ | $X$ |
| $X$ | $X$ |
| $X$ | $X$ |

$0.5+0.6=$ $\qquad$
$1.6-0.6=$ $\qquad$

$1.8-0.9=$ $\qquad$
$1.7-1.3=$ $\qquad$ $1.4+0.5=$ $\qquad$
(7)
(8)

| 5.1 |
| ---: |
| $+\quad 7.2$ |

(9)
(10)

| $x$ | $x$ |
| :---: | :---: |
| $x$ | $x$ |
| $x$ | $x$ |
| $x$ |  |
|  |  |

(6)



| 4.2 |
| ---: |
| $+\quad 3.7$ |

$\begin{array}{r}4.2 \\ +\quad 3.7 \\ \hline\end{array}$

| 8.4 |
| ---: |
| $+\quad 6.1$ |

(16) $7.3+4.7=$ $\qquad$
(16) $8.7-4.2=$ $\qquad$
(7) $5.4+3.8=$ $\qquad$
(8) $11.3+2.6=$ $\qquad$
(12)

$$
\begin{array}{r}
8.7 \\
-\quad 5.9 \\
\hline
\end{array}
$$

(13)

$$
\begin{array}{r}
6.4 \\
+\quad 4.6 \\
\hline
\end{array}
$$

(2) Sam's bowling ball is 4.1 kg . Selina's bowling ball is 0.9 kg lighter. What is the weight of Selina's bowling ball?

Selina's bowling ball is $\qquad$ kg.
(3) It takes 6.2 hours to get from Toronto to Montreal by car.
a. How long does a round trip take by car?

## Hints

A "round trip" means travelling to a place and back.

A round trip takes $\qquad$ hours by car.
b.

Travelling by train takes 4.9 hours each way. How much faster is travelling by train than by car?

Travelling by train is $\qquad$ hours faster.
(1) A barrel had 4709 mL of water. It had leaked for four hours until there was only 1245 mL of water left. How much water did it leak every 30 minutes?

Amount of water leaked : $\qquad$ - $\qquad$
$\qquad$
Amount of water leaked every 30 minutes
$\qquad$ $\div$

$=$ $\qquad$ no. of 30-minute intervals in 4 hours

The barrel leaked $\qquad$ of water every 30 minutes.
(2) Cassie places a mirror along the bottom edge of her name tag. What fraction of the letters in the mirror are the same as the original?

## CASSIE

(3) Henry's painting is 17 cm by 32 cm . He wants to build a $1.5-\mathrm{cm}$ thick frame around it. What will the area of the frame be?

## Topics covered:

Question 1

- subtraction
- division
- time

Question 2

- fractions
- movements
- movements
- 

(4) A package has 30 tea bags. $\frac{2}{5}$ of them are Earl Grey. How many Earl Grey tea bags are there in 58 packages?
(5) How many wooden triangles are needed to build 109 triangular pyramids and 176 triangular prisms?
(6) The gas price was 89.9 ¢ for each litre in Week 1, 90.2 c in Week 2, and 90.5 ל in Week 3. What will the gas price be in Week 5 if the pattern continues?
(7) A helicopter left at 11:20 a.m. and arrived at 1:50 p.m. The helicopter used 50 L of gas each hour. How much gas did it use for the flight?

Topics covered:

Question 4

- multiplication
- fractions

Question 5

- addition
- multiplication
- solids

Question 6

- decimals
- patterning

Question 7

- multiplication
- time

