

## Year 4 Term 2 Homework

<b>Student Name:</b> _____	<b>Grade:</b> _____
<b>Date:</b> _____	<b>Score:</b> _____

### Table of contents

<b>7 Year 4 Term 2 Week 7</b>	<b>1</b>
7.1 Topic 1 — Everyday Measurements . . . . .	1
7.2 Topic 2 — Length . . . . .	2
7.3 Topic 3 — Area . . . . .	3
7.4 Topic 4 — Volume . . . . .	4
7.5 Problem Solving (Guess and Check) . . . . .	5
7.6 Quiz 7 . . . . .	6
7.6.1 Part A . . . . .	6
7.6.2 Part B . . . . .	7
7.6.3 Part C . . . . .	8
7.7 Challenging Problems . . . . .	9

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## 7 Year 4 Term 2 Week 7

### 7.1 Topic 1 — Everyday Measurements

#### Exercise 7.1.1 Estimate the following items:

1. An apple  $\approx$  \_\_\_\_\_ g.  
(1) 120 g, (2) 500 g, (3) 200 g, (4) 800 g.
2. The average height of a 10 year old girl  $\approx$  \_\_\_\_\_ cm.  
(1) 100 cm, (2) 150 cm, (3) 130 cm, (4) 180 cm.
3. A glass of water  $\approx$  \_\_\_\_\_ mL.  
(1) 100 mL, (2) 300 mL, (3) 500 mL, (4) 1000 mL.
4. The capacity of a teaspoon  $\approx$  \_\_\_\_\_ mL.  
(1) 2 mL, (2) 5 mL, (3) 10 mL, (4) 50 mL.
5. The capacity of a bucket of water  $\approx$  \_\_\_\_\_ L.  
(1) 10 L, (2) 5 L, (3) 20 L, (4) 50 L.
6. Boiling point of water = \_\_\_\_\_ .  
(1)  $90^{\circ}\text{C}$ , (2)  $100^{\circ}\text{C}$ , (3)  $120^{\circ}\text{C}$ , (4)  $200^{\circ}\text{C}$ .
7. The length of an average family car  $\approx$  \_\_\_\_\_ m.  
(1) 5.5 m, (2) 2.5 m, (3) 3.5 m, (4) 7 m.
8. The area of a A4 size page  $\approx$  \_\_\_\_\_  $\text{cm}^2$ .  
(1)  $500\text{ cm}^2$ , (2)  $600\text{ cm}^2$ , (3)  $630\text{ cm}^2$ , (4)  $700\text{ cm}^2$ .
9. Normal body temperature  $\approx$  \_\_\_\_\_ .  
(1)  $27^{\circ}\text{C}$ , (2)  $37^{\circ}\text{C}$ , (3)  $41^{\circ}\text{C}$ , (4)  $47^{\circ}\text{C}$ .
10. Average walking speed  $\approx$  \_\_\_\_\_ km/h.  
(1) 12 km/h, (2) 10 km/h, (3) 5 km/h, (4) 2 km/h.
11. The height of a desk  $\approx$  \_\_\_\_\_ cm.  
(1) 50 cm, (2) 70 cm, (3) 100 cm, (4) 90 cm.

**7.2 Topic 2 — Length**

1. Change the units in brackets:

(a)  $206 \text{ cm} = \text{_____ (m) _____ (cm)}$ .

(b)  $1\frac{1}{2} \text{ m} = \text{_____ (cm)}$ .

(c)  $\frac{1}{4} \text{ m} = \text{_____ (cm)}$ .

(d)  $3 \text{ metres and } 7 \text{ centimetres} = \text{_____ (m)}$ .

(e)  $1\frac{1}{4} \text{ km} = \text{_____ (m)}$ .

(f)  $1.2 \text{ m} = \text{_____ (mm)}$ .

(g)  $250 \text{ mm} = \text{_____ (m)}$ .

(h)  $1250 \text{ mm} = \text{_____ (m)}$ .

(i)  $750 \text{ mm} = \text{_____ (km)}$ .

(j)  $7125 \text{ cm} = \text{_____ (mm)}$ .

2. How long would be the sides of a square with a perimeter of 48 cm?

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3. My sister is 96 cm tall and I am 1.35 m tall. How much shorter is my sister?

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4. Adam ran 200 m, jogged 100 m and then walked another 100 m. How much further must he travel to cover  $\frac{3}{4}$  km altogether?

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5. A rectangle has a perimeter of 56 cm. If one side of the rectangle is 12 cm long, how long is the other side?

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### 7.3 Topic 3 — Area

1. Change the units in brackets:

(a)  $2 m^2 =$  \_\_\_\_\_ ( $cm^2$ ).

(b)  $3.2 m^2 =$  \_\_\_\_\_ ( $cm^2$ ).

(c)  $1200 cm^2 =$  \_\_\_\_\_ ( $m^2$ ).

(d)  $\frac{1}{2} m^2 =$  \_\_\_\_\_ ( $cm^2$ ).

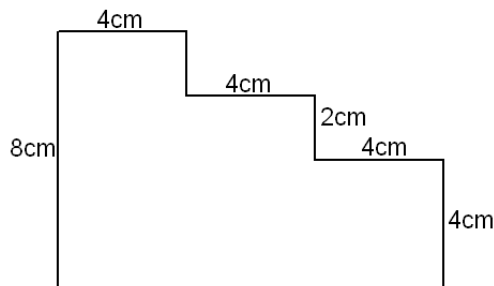
(e)  $25400 mm^2 =$  \_\_\_\_\_ ( $cm^2$ ).

(f)  $2900 mm^2 =$  \_\_\_\_\_ ( $m^2$ ).

(g)  $354 cm^2 =$  \_\_\_\_\_ ( $mm^2$ ).

(h)  $325 cm^2 =$  \_\_\_\_\_ ( $m^2$ ).

2. Find the area of the following shape: Area = \_\_\_\_\_

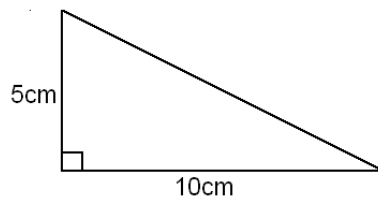



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3. Find the area of the following shape: Area = \_\_\_\_\_




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**7.4 Topic 4 — Volume**

1. Change the units in brackets:

(a)  $1.3 \text{ L} = \underline{\hspace{4cm}}$  (mL).

(b)  $375 \text{ cm}^3 = \underline{\hspace{4cm}}$  (mL).

(c)  $1245 \text{ mL} = \underline{\hspace{4cm}}$  ( $\text{cm}^3$ ).

(d)  $1.5 \text{ m}^3 = \underline{\hspace{4cm}}$  ( $\text{cm}^3$ ).

(e)  $\frac{1}{4} \text{ m}^3 = \underline{\hspace{4cm}}$  (L).

(f)  $825 \text{ cm}^3 = \underline{\hspace{4cm}}$  (L).

(g)  $\frac{1}{2} \text{ m}^3 = \underline{\hspace{4cm}}$  (mL).

(h)  $12 \text{ L} = \underline{\hspace{4cm}}$  ( $\text{cm}^3$ ).

2. A bottle holds 725 mL and a jug holds 1.5 L. How much more does the jug hold?

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3. A 1.25 L bottle of cordial is one quarter full. How many millilitres are in the bottle?

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4. A car consumed 3 L of petrol for every 25 km travelled. How many litres did the car use on a 110 km trip?

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5. How many 200 mL cups are needed to half fill a 4.5 L bucket?

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6. If you only have a 200 mL glass and a 250 mL glass. How could you measure out 900 mL using the two glasses?

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### 7.5 Problem Solving (Guess and Check)

1. Find two numbers whose product is 30 and whose sum is 11.

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2. Which two numbers when multiplied make 24 and added make 11?

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3. If 2 pens and 3 rulers cost 69 cents, 2 rulers and 3 pens cost 66 cents. How much do they each cost?

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4. Arrange the counting numbers from 1 to 9 in the 3 by 3 grid below to form a magic square.


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### 7.6 Quiz 7

#### 7.6.1 Part A

1. How many  $1\frac{1}{2}$  L bottles can be poured into an 21 L barrel?

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2. John drank 250 mL of cordial from a 1.25 L bottle. How many more drinks of the same size can he have before the bottle is empty?

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3. A car uses 12 L of petrol every 100 km travelled. The tank holds 65 L. How many times would the tank need to be filled for a 2000 km trip?

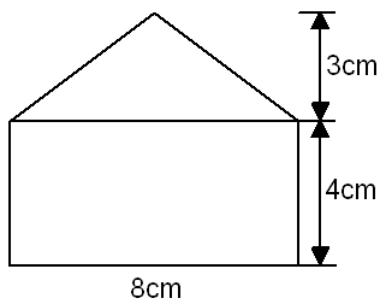
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4. Find the area of the given shape.



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**7.6.2 Part B**

1. Calculate the following:

(a)  $9 + 4 \times 2 - 3 =$  \_\_\_\_\_

(b)  $14 - 9 \div 3 - 1 =$  \_\_\_\_\_

(c)  $4 + 3 \times 3 + 12 =$  \_\_\_\_\_

(d)  $(4 + 3) \times 3 + 5 =$  \_\_\_\_\_

(e)  $20 - 16 \div 4 + 7 =$  \_\_\_\_\_

2. I bought a book for \$12.95 and a magazine for \$5.95. What change would I receive from \$50.00?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Ivy is paid \$7.25 for every hour she babysits her brother's daughter. How much would she receive for 6 hours?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. Peter bought 14 lollies for 15 cents each, a cup cake for 45 cents, and five liquorice sticks for 25 cents each. How much change did she receive from \$5.00?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. A bag contains three red marbles, one blue marble and four white marbles. What is the chance of drawing out:

(a) a red marble? \_\_\_\_\_

(b) a white marble? \_\_\_\_\_

(c) a blue marble or a white marble? \_\_\_\_\_



**7.6.3 Part C**

1. John bought a new rainwater tank. After a few days of rain, the tank was three quarters full and contained 450 L of water. What is the capacity of the rainwater tank?

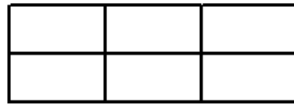
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2. How many rectangles, of any size are there in the figure shown below: \_\_\_\_\_



3. Sunny is reading a book with 36 pages. It has a picture on the second page there is a picture every third page after that. How many pages have pictures on them?

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4. Find the missing number for the given series:

1, 2, 6, 24, \_\_\_\_\_ 720 . . . .

5. Which sign  $\heartsuit$  (+, -,  $\times$ ,  $\div$ ) must replace with to make the following sentences true ?

(a)  $25 \heartsuit 5 + 3 \times 6 - 4 = 19$  \_\_\_\_\_

(b)  $2 \times 12 \heartsuit 4 - 8 + 16 = 14$  \_\_\_\_\_

(c)  $24 \div (8 \heartsuit 4) + 3 - 6 = 3$  \_\_\_\_\_

(d)  $3 \heartsuit 12 \div 4 - 2 = 7$  \_\_\_\_\_

(e)  $6 \times (8 \heartsuit 4) - 32 = 40$  \_\_\_\_\_

### 7.7 Challenging Problems

1. A magic square is one in which all rows, columns and diagonals have the same sum. Find the number marked 'X'. \_\_\_\_\_

18	13	21
		16
X		

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2. A bucket three quarters full, contains  $3\frac{3}{4}$  L of water. How much water will the bucket contain when it is four fifths full?

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3. In the rectangle below, line segment AB separates the rectangle into 2 sections. When second line segment CD is added, the rectangle will be separated into four sections. What is the largest number of sections into which the rectangle can be separated when 5 line segments are drawn through the rectangle? \_\_\_\_\_

