

## Year 4 Term 4 Homework

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

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## 4 Year 4 Term 4 Week 4 Homework

### 4.1 Topic 1 — Percentages

#### Exercise 4.1.1

1. Cathy got 86% of the words correct on a spelling test. What percentage of the words did she spell incorrectly?

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2. A car salesman was paid a 5% bonus on his annual salary of \$38,500. How much was his bonus?

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3. If 17.5% of the 400 sheep in a paddock were shorn on Monday, find the number of sheep that were shorn.

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4. John has 250 vehicles for sale in his car yard. If 42% of vehicles are new cars, 36% are used cars and the rest are motorbikes, find the number of motorbikes for sale.

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5. Max scored 63 out of 90 on his English exam. What was his mark as a percentage?

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6. For her weekly pay of \$480, Anna banks \$255, pays \$183 in rent and spends the rest. What percentage of her weekly income does she spend?

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## 4.2 Topic 2 — Ratio and rate

### Exercise 4.2.1 Change the following into the unit shown in brackets:

1. 2.15 hours = \_\_\_\_\_ (minutes)
2.  $5\frac{1}{4}$  years = \_\_\_\_\_ (months)
3. 0.75 km/h = \_\_\_\_\_ (m/minute)
4.  $\frac{1}{3}$  m/second = \_\_\_\_\_ (m/minute)
5. 72 km/h = \_\_\_\_\_ (m/minute)
6. 10 m per second = \_\_\_\_\_ (km/h)

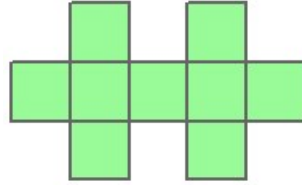
### Exercise 4.2.2

1. A plane flies 1200 km in  $1\frac{1}{4}$  hours. How far does it travel in 3 hours and 15 minutes?  
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\_\_\_\_\_
2. A distance of 12 km was walked at a speed of 4 km/h on the way and 6 km/h on the way back. What was the average speed?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. A river flows at 5 km/h. A boat can travel at a speed of 20 km/h when the water is still. Find the time the boat takes to travel 48 km up-stream against the current.  
\_\_\_\_\_  
\_\_\_\_\_
4. How long in minutes will it take to ride 10.8 km on a motorbike if it travels 12 m per second?  
\_\_\_\_\_  
\_\_\_\_\_
5. The distance between Town A and B is 21 km. On the way it takes 4 hours and 12 minutes, while the return trip was travelled at 7.5 km/h. What is the average speed of the round trip?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### 4.3 Topic 3 — Measurements

#### Exercise 4.3.1

1. The figure is made up of 4-cm squares. Find the perimeter of the figure.

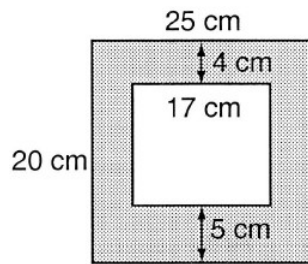


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2. Find the shaded area of the figure shown below.

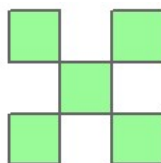


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3. Find the total area of the figure if each small square has a perimeter of 20 cm.

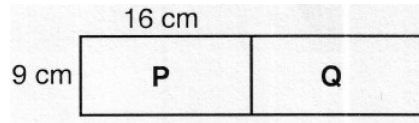


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4. Find the area of the whole figure if rectangle P measures 9cm by 16 cm and the perimeter of the whole figure is 86 cm.



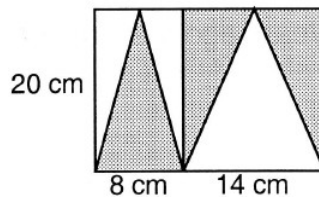
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5. The figure below is made up of 2 rectangles. Find the shaded area of the figure.



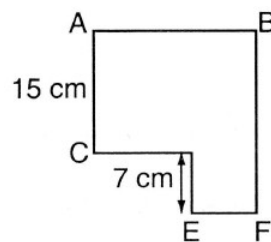
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6. The perimeter of the figure shown below is 80 cm. Find the length of AB.



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## 4.4 Problem Solving

### Exercise 4.4.1

1. A string is used to form a square and a triangle. The area of the square is  $100 \text{ cm}^2$ . The perimeter of the triangle is 15 cm shorter than that of the square. What is the length of the original string in metres?

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2. The length of a rectangular garden is  $\frac{2}{5}$  of its perimeter. Its perimeter is 60 m. Find the area of the garden.

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3. The length of a rectangle is thrice that of its breadth. If its perimeter is 200 cm. Find its area.

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4. A photograph which 16 cm by 9 cm was pasted on a rectangular cardboard, leaving a border 2 cm wide all round the photograph. Find the area of cardboard.

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5. A square is divided into four congruent rectangles. The perimeter of each of the four congruent rectangles is 25 cm. Find the perimeter of the original square.

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### 4.5 Diagnostic Test

1. Write down the smallest whole number which has only 4 factors. [5]

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1. \_\_\_\_\_

2. How many factors does the number 88 have? [5]

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2. \_\_\_\_\_

3. Find the HCF of 36 and 48. [5]

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3. \_\_\_\_\_

4. Find the LCM of 36 and 48. [5]

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4. \_\_\_\_\_

5. What is the sum of the first two common multiples of 5 and 7? [5]

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5. \_\_\_\_\_

6. What is the remainder when 5589 is divided by 6? [5]

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6. \_\_\_\_\_

7. What is the product of the second multiple of 5 and the difference between 123 and 645? [5]

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7. \_\_\_\_\_

8. The average of five numbers is 18. Suppose 24 is added to the five numbers. What is the average of the six numbers? [5]

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8. \_\_\_\_\_



9. Find the largest of the five consecutive numbers whose sum is 100. [5]

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9. \_\_\_\_\_

10. Patricia has \$12 more than Richard and \$14 more than Amy. Together all three have \$85. How much does Patricia have? [5]

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10. \_\_\_\_\_

11. 28 m of fencing is used to fence a rectangular garden. Let M represent the number of square metres in the area of the garden. What is the largest value that M could have? [5]

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11. \_\_\_\_\_

12. A woman weighed herself in January and noted her weight as 90 kg. Over next 6 months she lost 15% of her weight. What is her new weight? [5]

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12. \_\_\_\_\_

13. Find the retail price of a \$24 leather wallet if 30% discount is given. [5]

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13. \_\_\_\_\_

14. Find the number if 8% of its value is 64. [5]

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14. \_\_\_\_\_

15. A train 120 m long travels at 900 m per minute. How long does it take to pass a telegraph pole from the front to the back of the train? [5]

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15. \_\_\_\_\_

16. A cyclist travels at 21.6 km/h. How far in metres does he travel in 5 minutes? [5]

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16. \_\_\_\_\_

17. If 9 exercise books cost \$13.50, what is the cost of 5 books? [5]

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17. \_\_\_\_\_

18. Ben was 140 cm tall last year. This year he has grown by 5%. What is Ben's height this year? [5]

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18. \_\_\_\_\_

19. 63 litres of water was taken out of the water tank, and there is 65% of the water left. What is the original volume of the water tank? [5]

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19. \_\_\_\_\_

20. From this month the bus fare will rise by 15%. What will the cost be if the fee was \$2.80 last month? [5]

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20. \_\_\_\_\_