

## Fractions, decimals and percentages

This side of this worksheet reviews number skills. The other side of this worksheet refers to *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.1, 2.2 and 2.3.

**1** Complete the table below:

	-5	10	9	-2	4	11	-6	8	-12
-10									

**2** Complete the table below:

	21	56	84	35	77	49	63	28	42
÷ 7									

**3** Evaluate  $127 \times 1000$ .

**4** Evaluate  $35 \times 9$ .

**5** What are the next three numbers in the sequence?

4, 7, 10, 13, 16, ...

**6** Is 9 a factor of 504?

**7** Evaluate  $-7 - 3 \times -2$ .

**8** Evaluate  $1\frac{9}{10} + \frac{3}{10}$ .

**9** Find which is the bigger fraction:

$\frac{3}{4}$  or  $\frac{8}{11}$

**10** Find 20% of \$350.

**11** Evaluate  $1.34 + 0.57$ .

**12** Evaluate  $6^2$ .

Name:

Class:

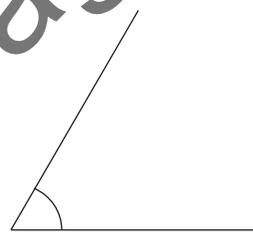
Teacher:

**13** Write an equation for the following problem.

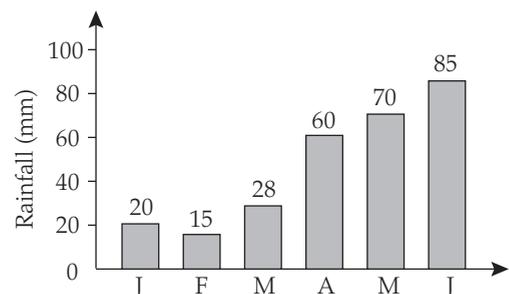
'A number is doubled and four is added. The result is 10.'

**14** If  $x = 7$ , find the value of  $4x + 1$ .

**15** Use a protractor to measure the angle.



**16** The following graph shows the average monthly rainfall (mm) for Wetsville during the first 6 months of the year.



Which is the driest month?

**17** How many seconds are in 2.5 hours?

Show all your  
working

This side of this worksheet covers *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.1, 2.2 and 2.3.

For online help, go to your *Pearson Mathematics 8* eBook.

- 1** Sort these numbers into ascending order without using a calculator.

$$\frac{1}{3}, \frac{1}{4}, 0.3, \frac{2}{5}, 0.6, \frac{5}{9}$$

- 2** Ms Harris had 100 chocolate eggs to share equally among the 28 students of her Year 8 class. How many eggs will each student get and how many will be left over?

- 3** Write  $2\frac{5}{8}$  as a decimal without using a calculator.

- 4** Write 0.18 as a fraction in simplest form.

- 5** Is 0.272 727 27... terminating, recurring or irrational?

- 6** Is  $\sqrt{2}$  terminating, recurring or irrational?

- 7** Write this fraction in exact decimal form.  
 $\frac{13}{18}$

- 8** Change this recurring decimal into fraction form.  
0.9 $\dot{3}$

- 9** Calculate  $-0.7 + 0.3$ .

- 10** Calculate  $-\frac{2}{3} \times \frac{1}{4}$ .

Practice  
2A mark:  
/10

## Fractions, decimals and percentages

This side of this worksheet reviews number skills. The other side of this worksheet refers to *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.4 and 2.5.

**1** Complete the table below:

	2	7	11	4	8	12	3	9	6
$\times 3$									

**2** Complete the table below:

	90	30	60	110	10	120	70	40	100
$\div 10$									

**3** Evaluate  $280 \div 10$ .

**4** Evaluate  $2378 \times 3$ .

**5** What are the next three numbers in the sequence?  
26.2, 26.0, 25.8, 25.6, 25.4, ...

**6** Which of these is not a factor of 16?  
1, 2, 4, 16, 32

**7** Evaluate  $-24 - 3 \times -4$ .

**8** Evaluate  $\frac{4}{5} + \frac{1}{3}$ .

**9** Which one of these fractions is not equal to  $\frac{3}{8}$ ?

$\frac{6}{16}$ ,  $\frac{12}{32}$ ,  $\frac{15}{40}$ ,  $\frac{26}{72}$

**10** Find 25% of 300 kg.

**11** Evaluate  $2.57 - 1.62$ .

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Teacher: \_\_\_\_\_

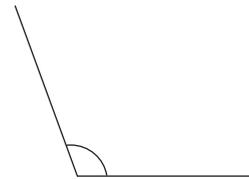
**12** Evaluate  $8^2$ .

**13** Write an equation for the following problem.

'A number is multiplied by 3 and then 6 is subtracted. The result is 9.'

**14** If  $v = 7$ , find the value of  $6v + 3$ .

**15** Use a protractor to measure the angle.



**16** A class was surveyed on their favourite type of sport. The results were put into a frequency table. What was the third most popular sport?

Sport	Frequency
Netball	4
Soccer	7
AFL	8
Basketball	6
Other	1
<b>Total</b>	<b>26</b>

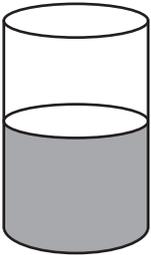
**17** How many metres are in 0.75 km?

Show all your working

This side of this worksheet covers *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.4 and 2.5.

For online help, go to your *Pearson Mathematics 8* eBook.

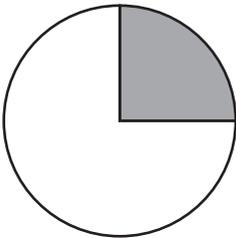
- 1** Estimate the percentage of water left in this glass.



- 2** Estimate (to the nearest 10%) the percentage of this rectangle that is shaded.



- 3** Estimate the percentage of the circle that is shaded.



- 4** Draw a square and shade approximately 30% of it.

- 5** Write  $\frac{1}{4}$  as a percentage.

- 6** Write 0.85 as a percentage.

- 7** Write  $\frac{3}{8}$  as a percentage.

- 8** Write 0.362 as a percentage.

- 9** Write  $1\frac{1}{4}$  as a percentage.

- 10** In Jarrod's family,  $\frac{3}{5}$  of the family members are male.  
What is this as a percentage?

Practice  
2B mark:  
/10

## Fractions, decimals and percentages

This side of this worksheet reviews number skills. The other side of this worksheet refers to *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.6 and 2.7.

**1** Complete the table below:

	6	-12	3	9	-4	7	-2	8	-5
$\times -4$									

**2** Complete the table below:

	-66	36	-12	48	-72	24	-54	42	-30
$\div 6$									

**3** Evaluate  $800 \div 100$ .

**4** Evaluate  $789 \times 9$ .

**5** What are the next three numbers in the sequence?

$1\frac{1}{4}, 1\frac{3}{8}, 1\frac{1}{2}, 1\frac{5}{8}, 1\frac{3}{4}, \dots$

**6** What is the lowest common multiple of 6 and 8?

**7** Evaluate  $-5 \times 6 \div -10$ .

**8** Evaluate  $1\frac{1}{8} \times \frac{4}{9}$ .

**9** What is 5.402 rounded to 2 decimal places?

**10** What is 20% of a class of 30 students?

**11** Evaluate  $23.5 + 32.6$ .

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Teacher: \_\_\_\_\_

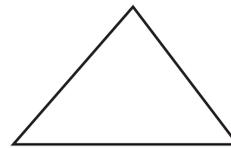
**12** Evaluate  $3^3$ .

**13** Solve this equation.

$$\frac{x}{3} = 6$$

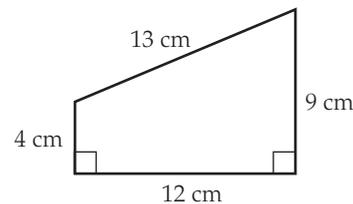
**14** Simplify  $7h + 4 - 3h + 2$ .

**15** Is this triangle an acute-angled triangle, an obtuse-angled triangle or a right-angled triangle?



**16** Evan tries to play a trick on Rich by weighting a coin so that the probability of getting 'heads' is now 0.4. What is the probability of getting 'tails' on this coin?

**17** Find the perimeter of this shape.



# Pearson Mathematics Homework Program

## Fractions, decimals and percentages

8

### Practice

2C

Show all your working



This side of this worksheet covers *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.6 and 2.7.

For online help, go to your *Pearson Mathematics 8* eBook.

**1** Convert 75% to a fraction in simplest form.

**2** Convert 87.5% to a fraction in simplest form.

**3** Convert 27% to a decimal.

**4** Convert  $\frac{1}{4}\%$  to a decimal.

**5** Kayla had a  $6\frac{1}{2}\%$  raise in her salary. By what fraction did her salary increase?

**6** Write 24 as a percentage of 25.

**7** Write 5 mm as a percentage of 4 cm.

**8** Write 4 days as a percentage of 4 weeks (to 2 decimal places).

**9** Sarah and Riley are in different classes but both took the same Maths test, which was out of 30 marks. Sarah got 27 marks. Riley got 23 marks, but because his class had less time they didn't do the last question, which was worth five marks. What percentage did each get on the test, and who got the better mark?

**10** Jackson gets \$20 to spend at the school canteen each week. One week he spends \$6 of this on drinks. What percentage of his canteen spending money did Jackson spend on drinks?

Practice  
2C mark:  
/10

## Fractions, decimals and percentages

This side of this worksheet reviews number skills. The other side of this worksheet refers to *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.8, 2.9 and 2.10.

**1** Complete the table below:

	-7	2	-11	4	-8	12	-3	9	-6
-12									

**2** Complete the table below:

	32	96	-16	56	72	-48	64	88	-24
÷ 8									

**3** Evaluate  $42\,000 \div 100$ .

**4** Evaluate  $3177 \times 8$ .

**5** What are the next three numbers in the sequence?

13.5, 12.6, 11.7, 10.8, ...

**6** What is the next prime number after 54?

**7** Evaluate  $5 - (-12) - 7$ .

**8** Evaluate  $2\frac{1}{4} - 1\frac{1}{2}$ .

**9** Insert a < or > symbol to make the expression true.

$1\frac{5}{6}$    $\frac{5}{3}$

**10** What is 30 out of 40 as a percentage?

**11** Evaluate  $3 \times 0.8$ .

Name: \_\_\_\_\_

Class: \_\_\_\_\_

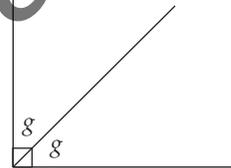
Teacher: \_\_\_\_\_

**12** Evaluate  $\sqrt{144}$ .

**13** Solve the equation.  
 $b - 5 = 12$

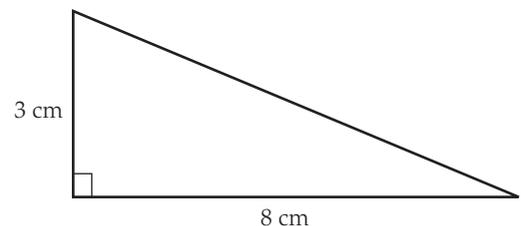
**14** If  $w = -1$ , find the value of  $7w + 1$ .

**15** Find the value of the angle  $g$  in the diagram.



**16** Decide whether you would describe the event 'There will be an earthquake at my school tomorrow' as 'impossible', 'not likely', 'likely' or 'certain'.

**17** Find the area of the shape.



# Pearson Mathematics Homework Program

## Fractions, decimals and percentages

8

### Practice

2D

Show all your working

This side of this worksheet covers *Pearson Mathematics 8* Chapter 2 'Fractions, decimals and percentages' sections 2.8, 2.9 and 2.10.

For online help, go to your *Pearson Mathematics 8* eBook.

- 1 Find 60% of 200 kg.
- 2 Is 20% of 5% of 100 the same as 5% of 20% of 100? Explain.
- 3 A particular bank will only let a person spend a maximum of 40% of their wage repaying the loan on their house. What is the maximum amount that a person earning \$1200 a week can repay?
- 4 In a class of 25 students, 40% of students have brown hair. How many students have brown hair in the class?
- 5 At Parkhill High there are 200 students in Year 8 and 60% of these students sign up to play football. Of these, 25% get into the interschool team. How many students play in the interschool team?
- 6 Matthew can run 100 m in 11.80 seconds. He hopes to decrease this time by 10% after more training. What time is he aiming for?
- 7 Georgia buys a car part that costs \$80 plus GST (10%). How much did the part cost?
- 8 A store offers a 15% discount on everything, so Dan buys a new quilt cover, which originally was \$70. What is the sale price of the quilt cover?
- 9 A clothing store buys jeans for \$15 from the wholesaler. If the store's mark-up is 200%, what is the selling price of the jeans?
- 10 Ella works for a furniture store and earns \$900 a week plus a commission of 1% on whatever she sells. What will Ella's weekly earnings be, if she sells \$52 000 of furniture in one week?

Practice  
2D mark:  
/10