

General revision

See Chapter 3

- 1 a Explain using a divisibility test why 195 is divisible by 3.
b Evaluate $195 \div 3$

See Chapter 3

- 2 Write $8 \times 8 \times 8 \times 8 \times 8$ using index notation (powers).

See Chapter 3

- 3 Evaluate each expression.

a 11^2

b $\sqrt{49}$

c 10^3

See Chapter 5

- 4 Evaluate each expression.

a $3 \times 5 \times 4$

b 20×18

c 45×9

d 16×12

See Chapter 5

- 5 Write an algebraic expression for 8 more than double x .

See Chapter 5

- 6 Simplify each expression.

a $2x + x$

b $m \times m \times 5$

c $7k \div 2$

d $2y \times 3$

e $10 - k \times n$

f $2 \times p + 4$

See Chapter 8

- 7 Copy and complete:

a $7.2 \text{ m} = \underline{\hspace{2cm}} \text{ mm}$

b $425 \text{ mL} = \underline{\hspace{2cm}} \text{ L}$

c $96 \text{ hours} = \underline{\hspace{2cm}} \text{ days}$

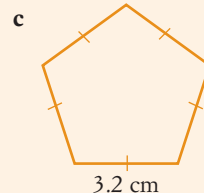
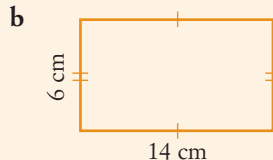
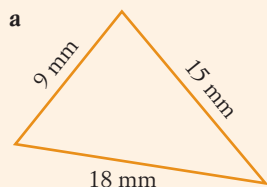
d $240 \text{ kg} = \underline{\hspace{2cm}} \text{ t}$

e $5000 \text{ cm} = \underline{\hspace{2cm}} \text{ m}$

f $6.7 \text{ m}^3 = \underline{\hspace{2cm}} \text{ L}$

See Chapter 8

- 8 Find the perimeter of each shape.



See Chapter 12

- 9 Write 6:10 p.m. in 24-hour time.

See Chapter 12

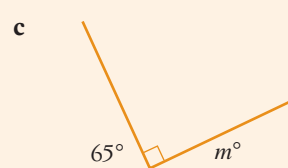
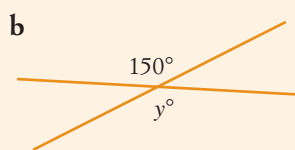
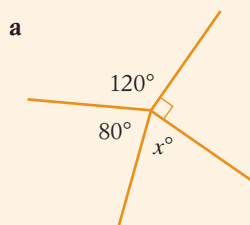
- 10 How many hours and minutes between 0635 and 1310 on the same day?

See Chapter 12

- 11 The ratio of parents to children at the Wiggles concert was 4 : 5. If there were 376 parents, how many children were there?

See Chapter 2

- 12 Find the size of each pronumeral.



See Chapter 1

- 13 Write this set of integers in ascending order: 6, -5, -3, 2, 4, 11.

14 Evaluate each expression.

See Chapter 1

a $-5 + 3$

b $-8 - 4$

c $10 - (-3)$

d -7×8

e $-12 \times (-10)$

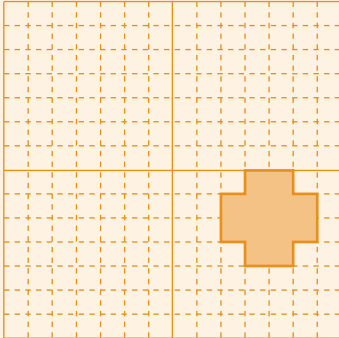
f $(-10)^2$

g $\frac{36}{-4}$

h $10 + 4 \times (-3)$

15 Translate this cross shape 8 units left and 5 units up.

See Chapter 6



16 If a coin is tossed, what is the probability that heads will come up? Write the answer as:

See Chapter 11

a a decimal

b a percentage

17 Write the sample space for the colours of a traffic light.

See Chapter 11

18 Copy and complete each pair of equivalent fractions.

See Chapter 4

a $\frac{8}{12} = \frac{\square}{3}$

b $\frac{4}{25} = \frac{\square}{100}$

c $\frac{15}{20} = \frac{3}{\square}$

d $\frac{2}{5} = \frac{10}{\square}$

19 Evaluate each expression.

See Chapter 4

a $\frac{2}{5} + \frac{1}{2}$

b $\frac{2}{3} - \frac{1}{4}$

c $\frac{1}{2} \times \frac{3}{4}$

d $\frac{3}{4} \div \frac{1}{2}$

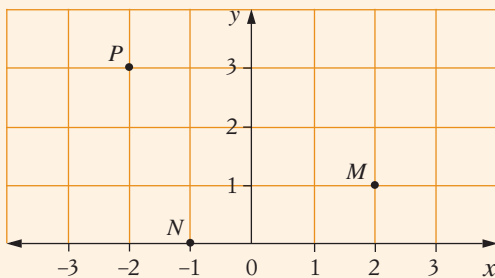
20 Write the coordinates of:

See Chapter 9

a *M*

b *N*

c *P*



21 Represent this set of data on a dot plot:

See Chapter 10

5 3 2 0 3 2 1 2 4 5

22 For the data set in question 21, find:

See Chapter 10

a the mean

b the median

c the mode

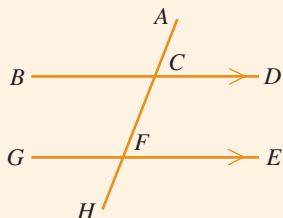
d the range

See Chapter 2

23 For this diagram, name:

- a** a pair of corresponding angles
- c** the transversal.

b a pair of vertically opposite angles



24 If $\angle AFE = 75^\circ$ in the diagram above, find the value of:

a $\angle FCD$

b $\angle BCF$

c $\angle ACD$

See Chapter 11

25 What is the probability that a person selected at random was born in a month beginning with J?

See Chapter 11

26 a Give an example of an event that is certain.

b What is the probability of an event that is certain?

See Chapter 12

27 Simplify each ratio.

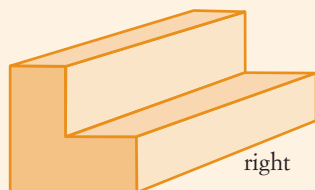
a $8 : 40$

b $12 : 9$

c $45\text{s} : 3\text{ min}$

See Chapter 8

28 For this prism, sketch each view.



a front view

b top view

c right view

See Chapter 9

29 Plot these points on a number plane and label them.

$R(3, 2)$ $S(0, 4)$ $T(-1, 3)$

See Chapter 3

30 Select the prime numbers from this list: 3, 12, 33, 11, 9, 40, 14, 18.

See Chapter 3

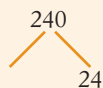
31 Write:

a the factors of 27

b the greatest common divisor (GCD) of 27 and 45.

See Chapter 3

32 Copy and complete this factor tree and express 240 as a product of its prime factors.



See Chapter 6

33 Draw a quadrilateral with one pair of parallel sides and name it.

See Chapter 6

34 a Draw a rhombus.

b How many axes of symmetry does a rhombus have?

c What order of rotational symmetry does a rhombus have?

35 Convert each decimal to a fraction in simplest form.

See Chapter 7

a 0.35

b 0.1

c 0.012

36 Round each decimal to one decimal place.

See Chapter 7

a 1.736

b 0.69

c 0.98

37 True or false?

See Chapter 7

a $5.92 \times 3 = 0.1776$

b $\frac{3}{100} = 0.03$

c $0.65 = \frac{12}{20}$

38 Solve each equation.

See Chapter 5

a $3b = 21$

b $r + 4 = 11$

c $2n + 3 = 11$

d $\frac{5p}{2} = 15$

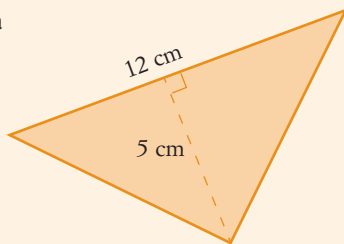
39 If $t = -1$, evaluate $3t - 4$.

See Chapter 5

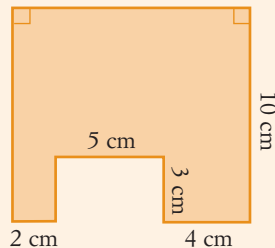
40 Find the area of each shape.

See Chapter 8

a



b



41 What is the volume of a room 7 m by 8 m by 3 m?

See Chapter 8

42 Find:

See Chapter 4

a $\frac{3}{4}$ of \$12

b $\frac{2}{3}$ of 24 m

c $\frac{1}{10}$ of 2 L (in mL)

d 10% of \$200

e 25% of 16 kg

43 Convert each to a percentage.

See Chapter 4

a $\frac{73}{100}$

b $\frac{3}{4}$

c 0.6

d 0.47

44 This stem-and-leaf plot shows the ages of people waiting at a medical centre.

See Chapter 10

Stem	Leaf
0	3
1	2 6 9
2	4
3	5 5 6 8
4	2 8
5	0 7
6	3 4

a How many people were waiting at the centre?

b Find the median age.

c How old was the oldest person?

d Find the mode.

45 Over 30 days, the number of sunny days in Westvale was 18.

See Chapter 11

a What is the experimental probability of having a sunny day in Westvale?

b Based on this probability, how many sunny days would be expected over a period of 100 days?

46 Petrol costs \$1.49 per litre.

- Calculate the cost of 30 litres of petrol.
- How much petrol can be bought for \$50? Answer correct to the nearest 0.1 L.

47 Evaluate each expression.

a 6.9×4.3 **b** $15.35 \div 5$ **c** $7.3 - 1.986$

48 Convert each fraction to a decimal.

a $\frac{5}{8}$ **b** $\frac{11}{20}$ **c** $\frac{1}{6}$

49 a Draw an isosceles right-angled triangle.
b Write the size of each angle in the above triangle.

50 Write 2045 in 12-hour time.