

- 1 Write in figures the number one hundred and twenty one thousand and forty two.

Answer [1]

- 2 Write down the number of centimetres in $2\frac{1}{2}$ metres.

Answer cm [1]

- 3 Work out 72 cents as a percentage of 83 cents.

Answer % [1]

- 4 There were 41 524 people at a football match.

- (a) Write 41 524 correct to the nearest thousand.

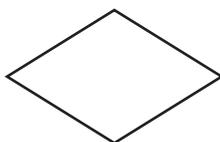
Answer(a) [1]

- (b) One quarter of the 41 524 people left before the end of the game.

Find the number of people who left before the end of the game.

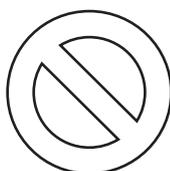
Answer(b) [1]

- 5 (a) Write down the order of rotational symmetry of this shape.



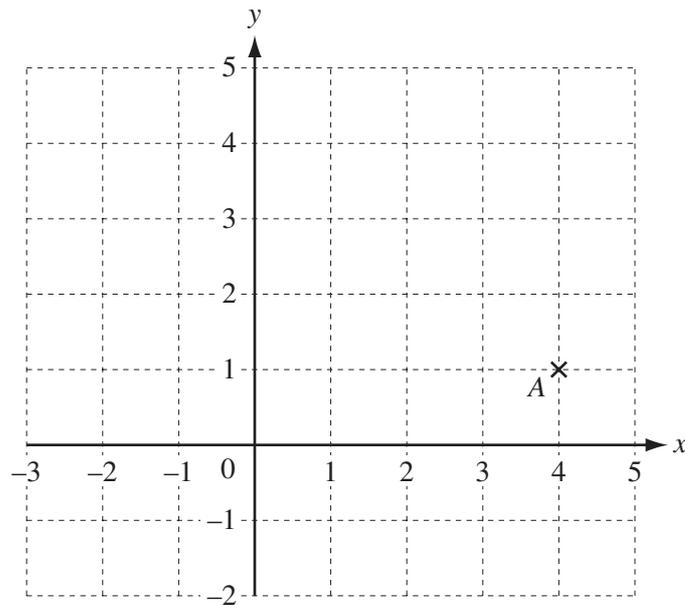
Answer(a) [1]

- (b) Draw the lines of symmetry on this shape.



[1]

6



(a) Write down the co-ordinates of point A.

Answer(a) (.....,) [1]

(b) On the grid, plot the point $(-1, 3)$.

[1]

7 Simplify the following expression.

$$5a - 3b - 2a - b$$

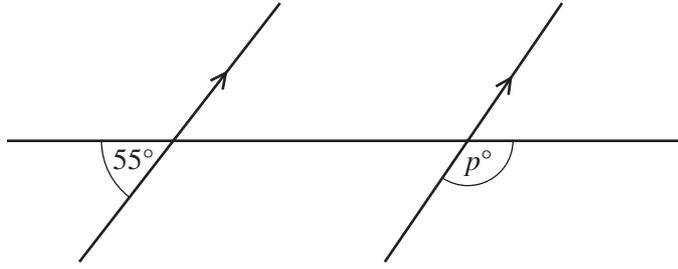
Answer [2]

8 Calculate $\frac{5.27 - 0.93}{4.89 - 4.07}$.

Give your answer correct to 4 significant figures.

Answer [2]

9



NOT TO
SCALE

Find the value of p .

Answer $p =$ [2]

10 Calculate 17.5% of 44 kg.

Answer kg [2]

11 Find the value of

(a) 9^4 ,

Answer(a) [1]

(b) 6^0 .

Answer(b) [1]

12 Solve the equation.

$$5 - 2x = 3x - 19$$

Answer $x =$ [2]

13 Yim knows one angle of an isosceles triangle is 48° .
He says one of the other angles **must** be 66° .

Explain why Yim is wrong.

Answer

..... [2]

14

S	P	A	C	E	S
---	---	---	---	---	---

One of the 6 letters is taken at random.

(a) Write down the probability that the letter is S.

Answer(a) [1]

(b) The letter is replaced and again a letter is taken at random.
This is repeated 600 times.

How many times would you expect the letter to be S?

Answer(b) [1]

- 15 The length, p cm, of a car is 440 cm, correct to the nearest 10 cm.

Complete the statement about p .

Answer $\leq p <$ [2]

16

8 15 7 8 7 15 4 13 4 3 10 2 9 4 5

- (a) Write down the mode.

Answer(a) [1]

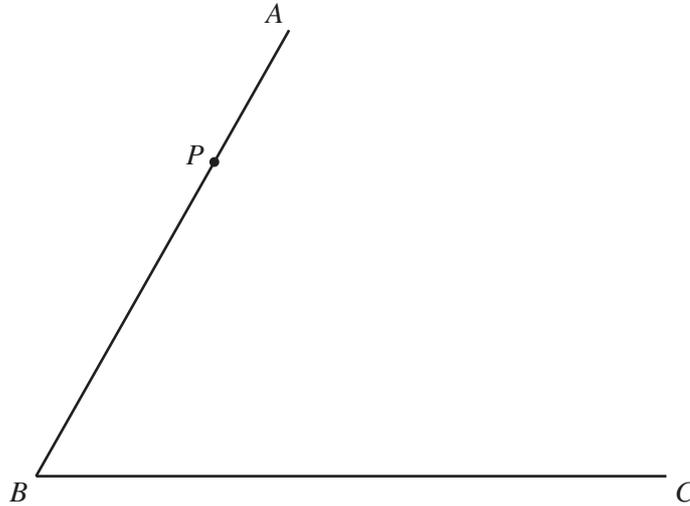
- (b) Work out the median.

Answer(b) [2]

- 17 Bruce invested \$800 at a rate of 3% per year simple interest.

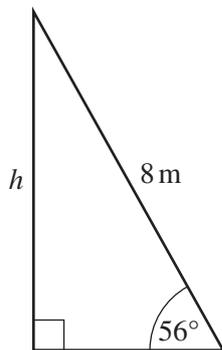
Calculate the **total** amount he has after 6 years.

Answer \$ [3]



- (a) On the diagram above, draw a line perpendicular to the line AB , through the point P . [1]
- (b) **Using a straight edge and compasses only**, construct the locus of points that are equidistant from A and from C . [2]
-

- 19 The diagram shows a ladder of length 8 m leaning against a vertical wall.



NOT TO
SCALE

Use trigonometry to calculate h .
Give your answer correct to 2 significant figures.

Answer $h = \dots\dots\dots$ m [3]

20 $\mathbf{a} = \begin{pmatrix} 4 \\ 3 \end{pmatrix}$ $\mathbf{b} = \begin{pmatrix} -2 \\ 0 \end{pmatrix}$ $\mathbf{c} = \begin{pmatrix} 1 \\ -5 \end{pmatrix}$

Find

(a) $4\mathbf{a}$,

Answer(a) $\begin{pmatrix} \\ \end{pmatrix}$ [2]

(b) $\mathbf{b} - \mathbf{c}$.

Answer(b) $\begin{pmatrix} \\ \end{pmatrix}$ [2]

21 Do not use a calculator in this question and show all the steps of your working.

Give each answer as a fraction in its lowest terms.

Work out.

(a) $\frac{3}{4} - \frac{1}{12}$

Answer(a) [2]

(b) $2\frac{1}{2} \times \frac{4}{25}$

Answer(b) [2]

22 (a) Factorise completely.

$6ab - 24bc$

Answer(a) [2]

(b) Rearrange the following formula to make m the subject.

$$j = \frac{m}{n} - k$$

Answer(b) $m =$ [2]

23 (a) Here are the first four terms of a sequence.

27 23 19 15

(i) Write down the next term in the sequence.

Answer(a)(i) [1]

(ii) Explain how you worked out your answer to **part (a)(i)**.

Answer(a)(ii) [1]

(b) The n th term of a different sequence is $4n - 2$.

Write down the first three terms of this sequence.

Answer(b) , , [1]

(c) Here are the first four terms of another sequence.

-1 2 5 8

Write down the n th term of this sequence.

Answer(c) [2]

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.