

Please write clearly in block capitals.

Centre number

Candidate number

Surname _____

Forename(s) _____

Candidate signature _____

I declare this is my own work.

Functional Skills Level 2 MATHEMATICS

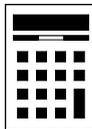
Paper 2 Calculator

Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a calculator
- mathematical instruments.



Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.
- State the units of your answer where appropriate.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 60.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.
- If your calculator does not have a π button, take the value of π to be 3.142

Advice

In all calculations, show clearly how you work out your answer.

| For Examiner's Use | |
|--------------------|------|
| Question | Mark |
| 1–6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| TOTAL | |



N 0 V 2 1 8 3 6 2 2 0 1

Section AAnswer **all** questions in the spaces provided.

1 The probability of an event happening is $\frac{3}{5}$

Circle the probability of the event **not** happening.**[1 mark]**

1

 $\frac{2}{5}$ $\frac{3}{5}$

0

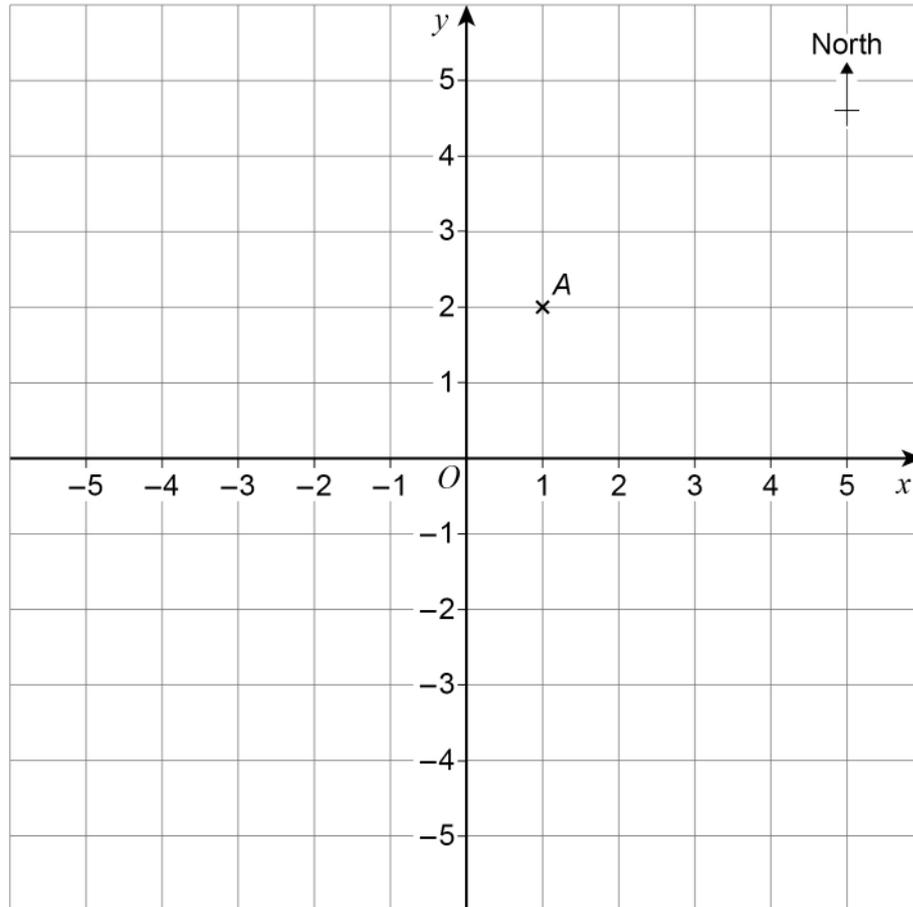
2 $x = 5$ and $y = -3.2$

Work out the value of $x + y^2$ **[2 marks]**

Answer _____



3



A is the point $(1, 2)$

B is the point

3 squares West of A

and

5 squares South of A .

Work out the coordinates of B .

[2 marks]

Answer (_____ , _____)

Turn over ►



4 In the boxes, write the number that is

3 more than -8

4 less than -2

halfway between -7 and 5

[3 marks]

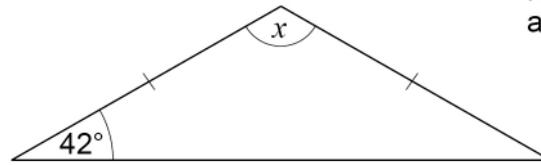
5 Write the ratio $144 : 90$ in its simplest form.

[2 marks]

Answer _____ :



6 Here is an isosceles triangle.



Not drawn
accurately

Work out the size of angle x .

[2 marks]

Answer _____^o

12

Turn over for Section B

Turn over ►



- 7 (c)** Jim is thinking of buying solar panels.
The price of these panels has decreased by 27% since 2016
Jim would need to pay £4803.40 for the panels now.

How much would the panels have cost in 2016?

[3 marks]

Answer £ _____

11



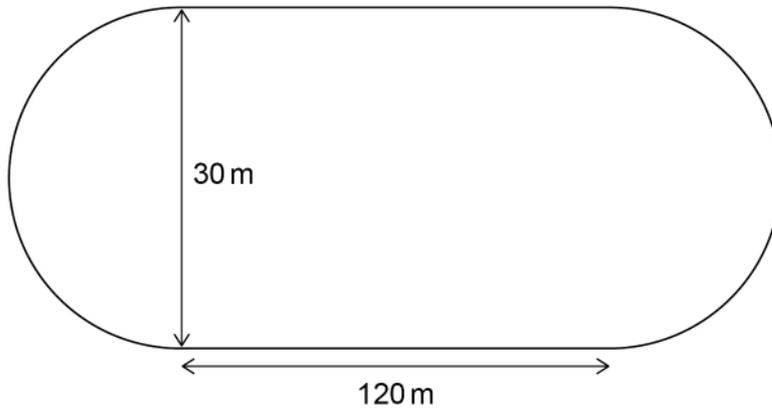
8 Dog

Ben has a dog called Pluto.

8 (a) Ben takes Pluto for a walk.

They walk **4 laps** of a sports track.

The sports track is the shape of two semi-circles joined by two straight sections.



Not drawn
accurately

Ben has a target to walk 5000 m each day.

What percentage of his daily target has Ben completed on this walk?

[5 marks]

Answer _____ %

Question 8 continues on the next page

Turn over ►

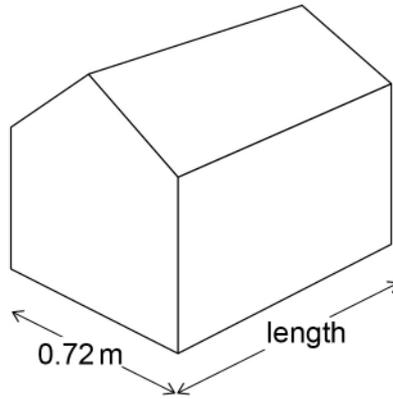


8 (c) In his garden, Ben has a rectangular fenced area for Pluto.

The fenced area measures 2.4 m by 2.25 m

Ben builds a kennel for Pluto which covers $\frac{1}{6}$ of the fenced area.

Here is a sketch of the kennel.



The base of the kennel is a rectangle.

Work out the length of the kennel.

[4 marks]

Answer _____ m

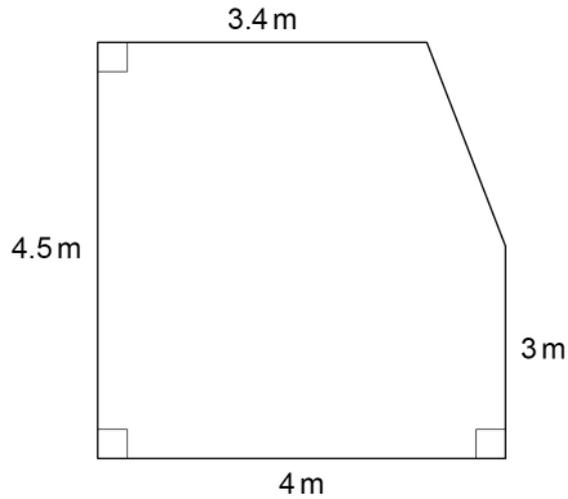
Turn over for the next question



10 Conservatory

Molly is building a conservatory.

10 (a) Here is a plan view of the conservatory.



Not drawn
accurately

The conservatory floor will be made of concrete.

The concrete floor will be 0.1 m deep.

What volume of concrete will Molly need for the floor?

State the units of your answer.

[6 marks]

Answer _____

Question 10 continues on the next page

Turn over ►



There are no questions printed on this page

*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



