



# VISUTEACH

## Maths Demo Paper

This is a multiple choice test.

Answers should be marked on the answer sheet provided.

Use a pencil to mark your answer in the column that has the same number as the test question by drawing a firm horizontal line through the rectangle next to your answer.

If you make a mistake, rub it out and put in your new answer. You should only mark one answer for each question.

If you cannot do a question, do not waste time, move onto the next question. If you are not sure of an answer, you should make a guess.

There are 20 questions and you have 20 minutes to do the test.

1

Jack was  $x$  years old 4 years ago.

How old will he be 6 years from now?

- A  $x+2$    B  $x+4$    C  $x+6$    D  $x+10$    E  $x+8$

2

A, B and C are the angles of an isosceles triangle. Angle A measures  $70^\circ$ . Angle B is greater than  $60^\circ$ .

What is the size of angle C?

- A  $70^\circ$    B  $50^\circ$    C  $60^\circ$    D  $55^\circ$    E  $40^\circ$

3

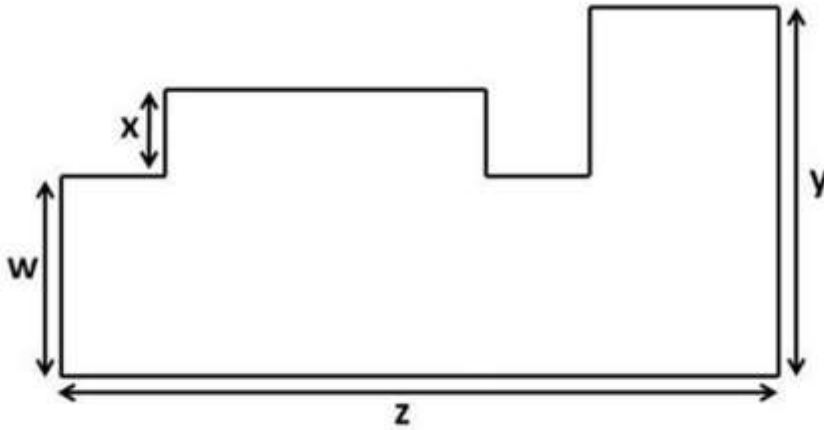
	m to feet	feet to m
5	16.40 ft	1.52 m
8	?	2.44 m
10	32.81 ft	3.05 m
13	42.65 ft	3.96 m

The table shows some values in a conversion table of metres to feet and feet to metres. From the table you can see that 5 m = 16.4 feet and that 5 feet = 1.52 m.

What figure should replace the question mark?

- A 25.40 ft   B 26.25 ft   C 23.80 ft   D 25.80 ft   E 24.90 ft

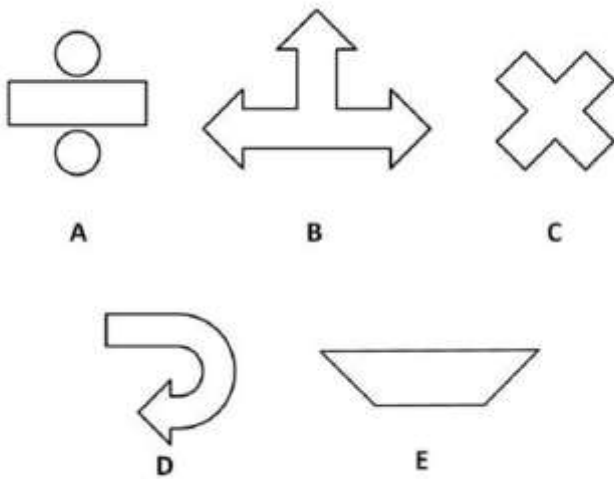
4



What is the perimeter of this shape?

- A  $2x+2y+2z$
- B  $w+2x+2z$
- C  $y+w+x+2z$
- D  $2w+y+2z$
- E  $y+w+x+z$

5



Which of these shapes have rotational symmetry?

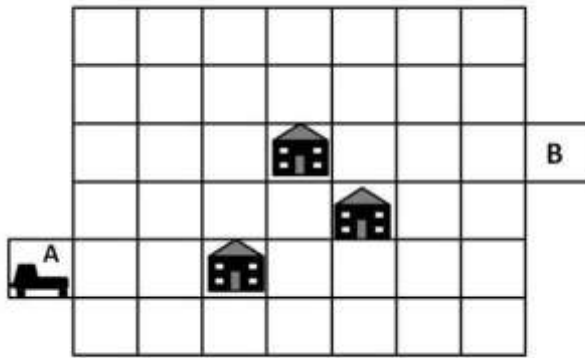
- A A and B
- B B and E
- C C and D
- D A and C
- E C and E

6

If  $5x - 6 = 7x + 4$ , what is  $x$ ?

- A 3
- B -3
- C -5
- D 5
- E 7

7

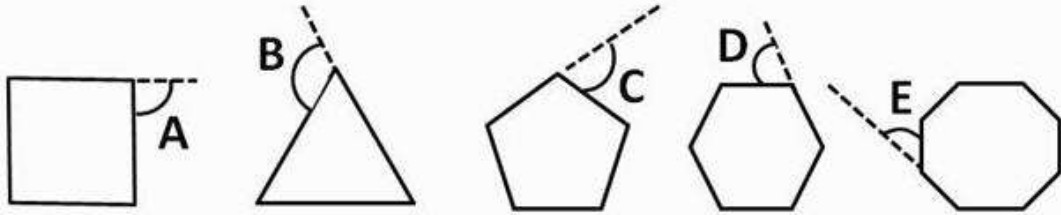


A radio controlled car needs to be guided along the white squares from point A to point B, avoiding the houses on the way. The car can only move FORWARD, TURN RIGHT 90° and TURN LEFT 90°.

Which instructions should you use to guide the car?

- A FORWARD 2, TURN RIGHT 90°,  
FORWARD 1, TURN LEFT 90°,  
FORWARD 4, TURN LEFT 90°,  
FORWARD 4, TURN RIGHT 90°,  
FORWARD 2
- B FORWARD 2, TURN LEFT 90°,  
FORWARD 1, TURN RIGHT 90°,  
FORWARD 4, TURN LEFT 90°,  
FORWARD 1, TURN RIGHT 90°,  
FORWARD 2
- C FORWARD 2, TURN RIGHT 90°,  
FORWARD 1, TURN LEFT 90°,  
FORWARD 3, TURN LEFT 90°,  
FORWARD 3, TURN RIGHT 90°,  
FORWARD 3
- D FORWARD 2, TURN RIGHT 90°,  
FORWARD 1, TURN LEFT 90°,  
FORWARD 4, TURN LEFT 90°,  
FORWARD 3, TURN RIGHT 90°,  
FORWARD 2
- E FORWARD 1, TURN LEFT 90°,  
FORWARD 2, TURN RIGHT 90°,  
FORWARD 3, TURN RIGHT 90°,  
FORWARD 3, TURN RIGHT 90°,  
FORWARD 3

8

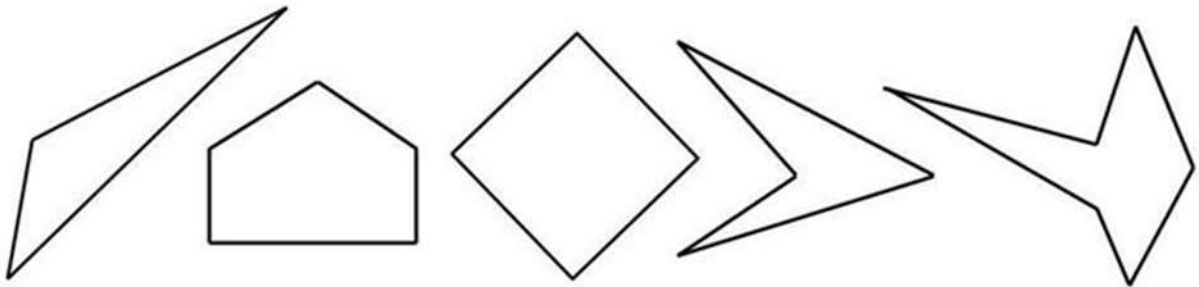


The diagram shows exterior angles for 5 regular polygons.

Which one of these angles is the smallest?

- A A   B B   C C   D D   E E

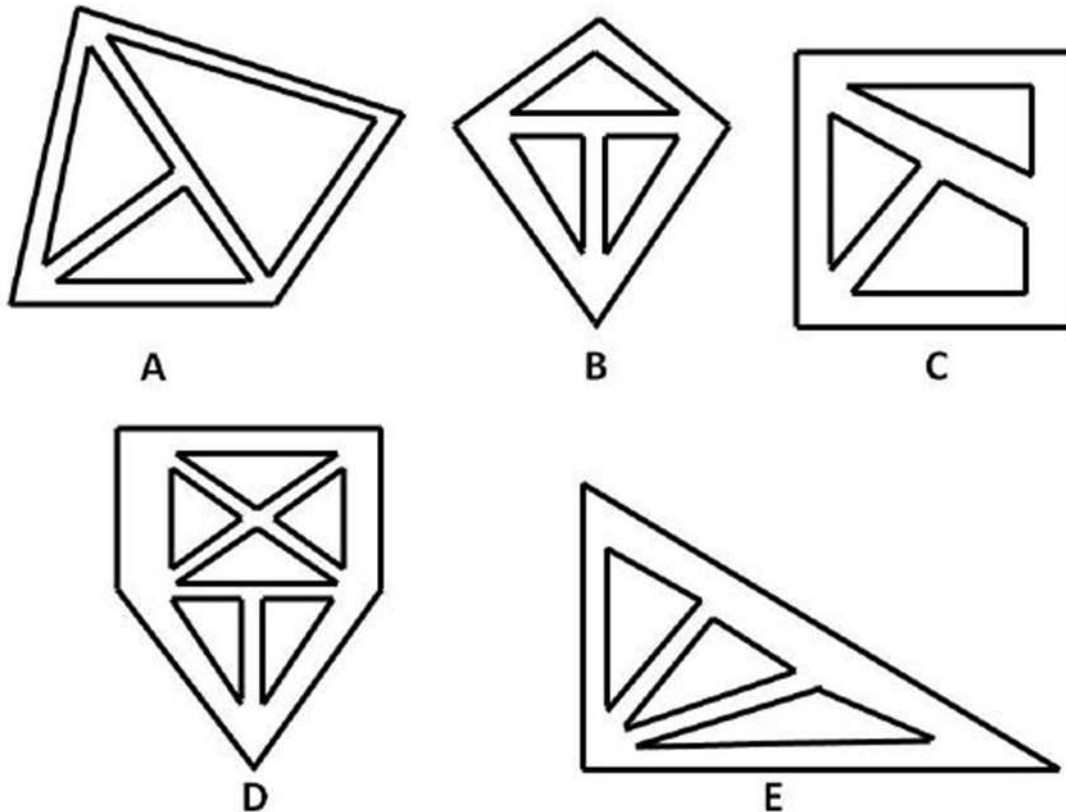
9



How many of these shapes contain interior reflex angles?

- A 1   B 2   C 3   D 4   E 5

10



A milkman delivers milk to certain housing estates. The street layout of the housing estates is shown in the diagram above. The milkman wants to avoid visiting the same street more than once, but there are no restrictions on him passing over the same street corners.

**On which housing estate is this possible?**

- A A   B B   C C   D D   E E

11

Carol has 23 photo albums, and each album contains 480 photos.

**How many photos does she have in total?**

- A 12,160   B 10,840   C 11,120   D 12,060   E 11,040

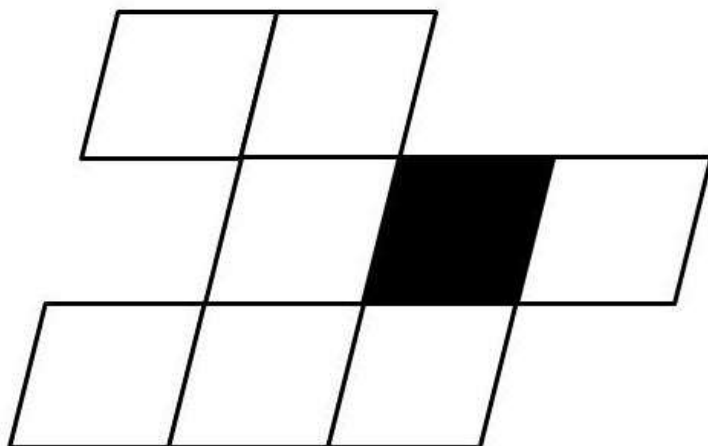
12

Anthony draws a plan of his house using a scale of 3 cm to 7 m. The kitchen has a length of 7.5 cm on the plan.

**What is the real length of the kitchen?**

- A 17.5 m   B 18.2 m   C 17.4 m   D 18.5 m   E 19.4 m

13



The area of the black parallelogram is  $30 \text{ mm}^2$ .

What is the area of the large shape?

- A  $2400 \text{ mm}^2$    B  $0.24 \text{ cm}^2$    C  $24,000 \text{ mm}^2$    D  $2.4 \text{ cm}^2$    E  $24 \text{ cm}^2$

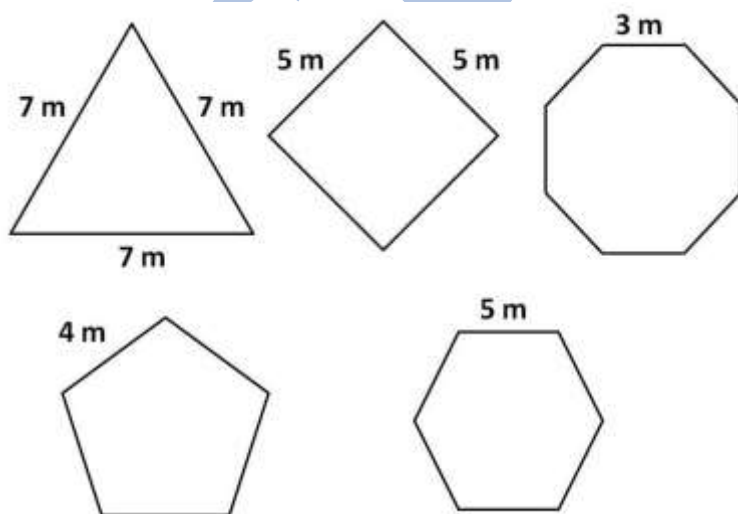
14

Jack is looking at the dessert menu at a restaurant. There are 3 types of ice cream, 5 types of sorbet and 2 types of tart. Jack decides that he will have an ice cream, a sorbet and a tart.

How many possible combinations of ice cream, sorbet and tart can Jack choose from?

- A  $(3 \times 5) + (3 \times 2)$    B  $(2 \times 3) + (2 \times 5)$    C  $(5 \times 2) + (5 \times 3)$    D  $2 \times (5 + 3)$    E  $3 \times 5 \times 2$

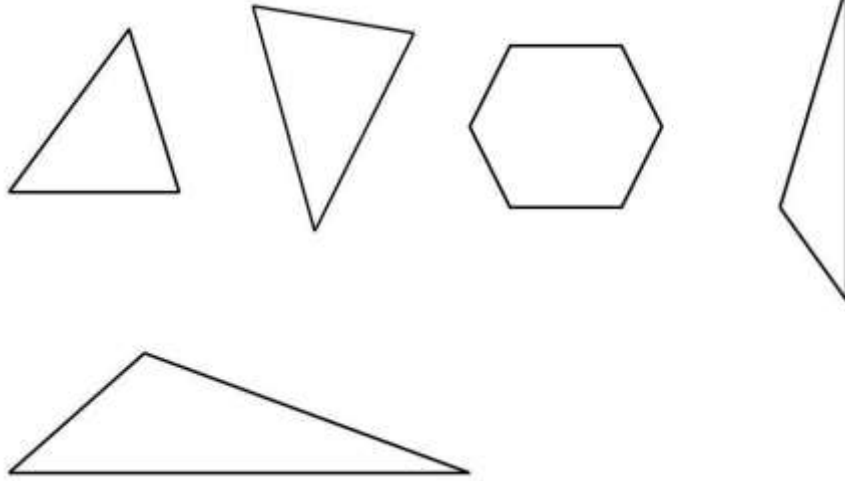
15



How many of these shapes have a perimeter greater than 20 metres?

- A 4   B 3   C 5   D 2   E 1

16



How many of these shapes contain obtuse angles?

- A 1   B 2   C 3   D 4   E 5

17



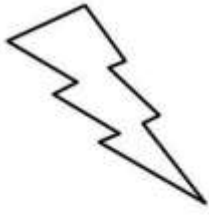
The diagram above shows part of a shape and its line of symmetry.

What is the name of the complete shape?

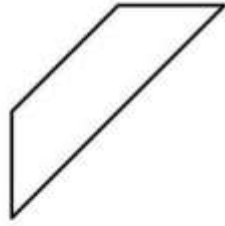
- A triangle   B rectangle   C pentagon   D kite   E rhombus



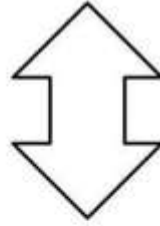
18



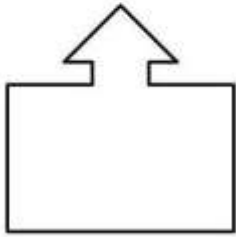
A



B



C



D

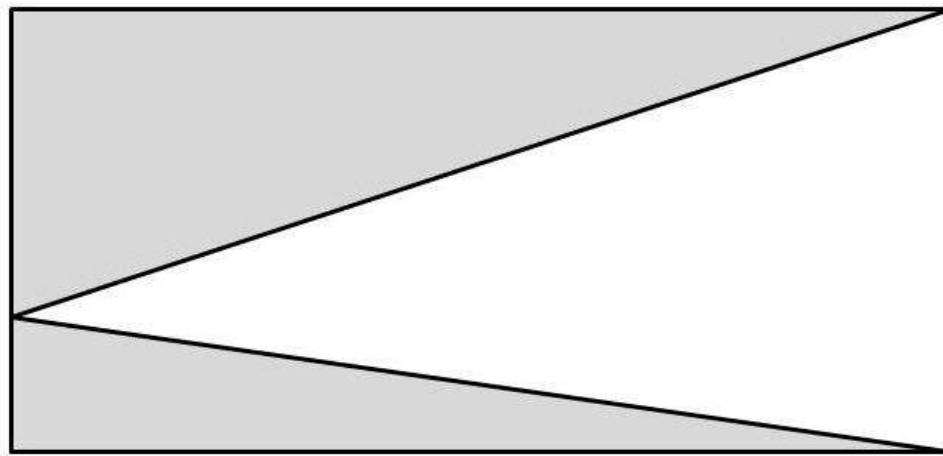


E

Which of these shapes have rotational symmetry?

- A A and C    B C and E    C B and D    D D and E    E E and B

19

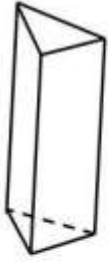


The area of the white triangle is  $46 \text{ cm}^2$ .

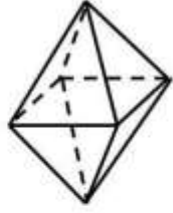
What is the area of the shaded part of the rectangle?

- A  $56 \text{ cm}^2$     B  $48 \text{ cm}^2$     C  $54 \text{ cm}^2$     D  $46 \text{ cm}^2$     E  $58 \text{ cm}^2$

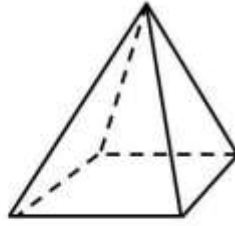
20



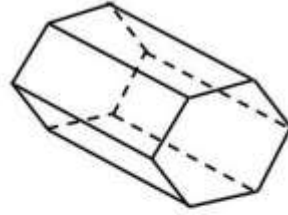
A



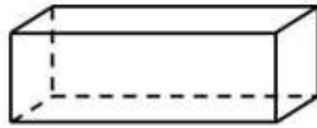
B



C



D



E

How many shapes have more vertices than faces?

- A 1   B 2   C 3   D 4   E 5