

## Visuteach GL Assessment 11 Plus Maths Sample Questions

<http://visuteach.com>

For answers and explanations, go to <http://visuteach.com/11-plus-maths>

1.

Jack was  $x$  years old 4 years ago. How old will he be 6 years from now?

Choose one of the following answers:

- $x+2$
- $x+4$
- $x+6$
- $x+10$
- $x+8$

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?

Choose one of the following answers:

- $70^\circ$
- $50^\circ$
- $60^\circ$
- $55^\circ$
- $40^\circ$

3.

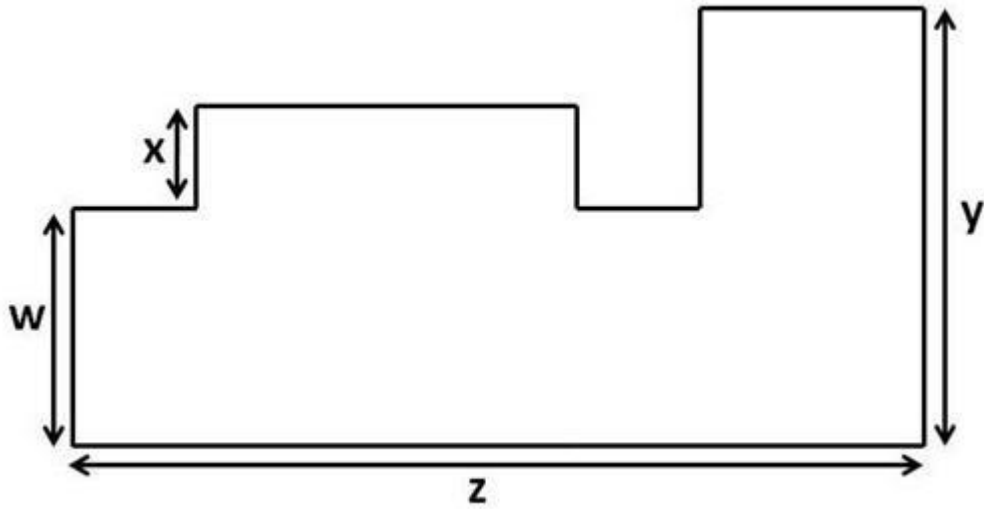
	m to feet	feet to m
5	16.40 ft	1.52 m
8	?	2.44 m
10	32.81 ft	3.05 m
13	42.65 ft	3.96 m

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?

Choose one of the following answers:

- 25.40 ft
- 26.25 ft
- 23.80 ft
- 25.80 ft
- 24.90 ft

4.



What is the perimeter of this shape?

Choose one of the following answers:

$2x+2y+2z$

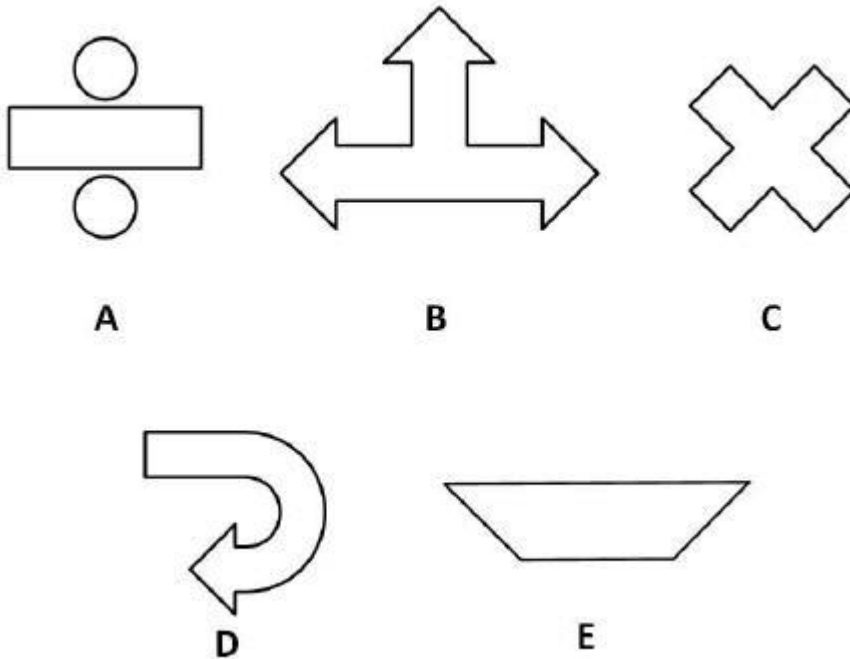
$w+2x+2z$

$y+w+x+2z$

$2w+y+2z$

$y+w+x+z$

5.



Which of these shapes have rotational symmetry?

Choose one of the following answers:

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

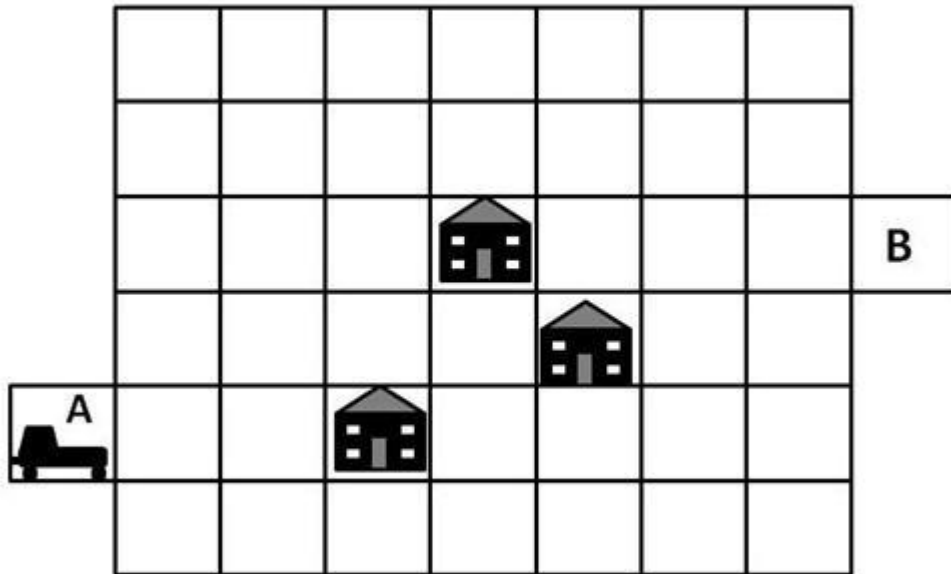
6.

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

Choose one of the following answers:

- 3
- 3
- 5
- 5

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  $90^\circ$  and TURN LEFT  $90^\circ$ .

Which instructions should you use to guide the car?

Choose one of A, B, C or D

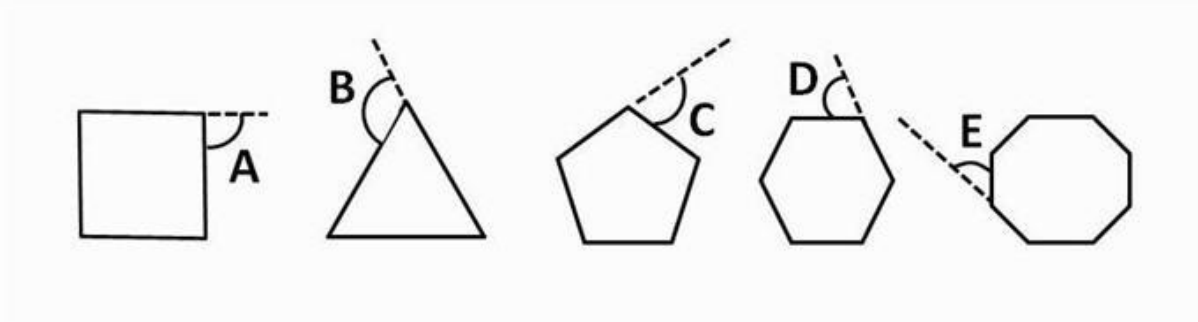
A) FORWARD 2, TURN RIGHT  $90^\circ$ ,  
 FORWARD 1, TURN LEFT  $90^\circ$ ,  
 FORWARD 4, TURN LEFT  $90^\circ$ ,  
 FORWARD 4, TURN RIGHT  $90^\circ$ ,  
 FORWARD 2

B) FORWARD 2, TURN LEFT  $90^\circ$ ,  
 FORWARD 1, TURN RIGHT  $90^\circ$ ,  
 FORWARD 4, TURN LEFT  $90^\circ$ ,  
 FORWARD 1, TURN RIGHT  $90^\circ$ ,  
 FORWARD 2

C) FORWARD 2, TURN RIGHT  $90^\circ$ ,  
 FORWARD 1, TURN LEFT  $90^\circ$ ,  
 FORWARD 3, TURN LEFT  $90^\circ$ ,  
 FORWARD 3, TURN RIGHT  $90^\circ$ ,  
 FORWARD 3

D) FORWARD 2, TURN RIGHT  $90^\circ$ ,  
FORWARD 1, TURN LEFT  $90^\circ$ ,  
FORWARD 4, TURN LEFT  $90^\circ$ ,  
FORWARD 3, TURN RIGHT  $90^\circ$ ,  
FORWARD 2

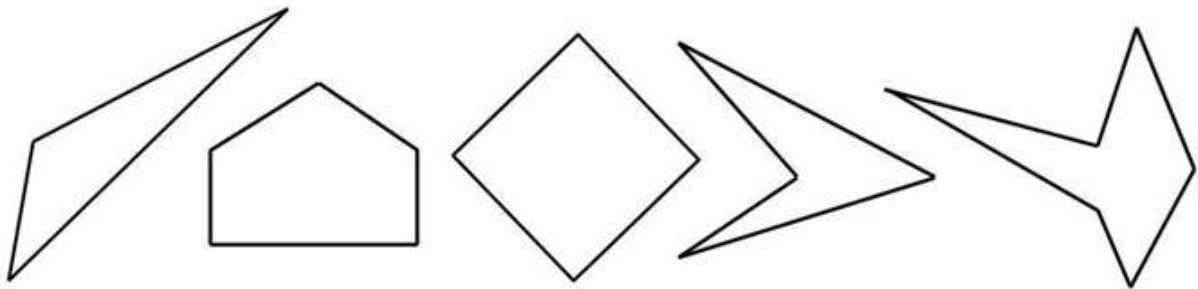
8.



The diagram shows exterior angles for 5 regular polygons. Which one of these angles is the smallest?

Choose one of A, B, C, D or E

9.

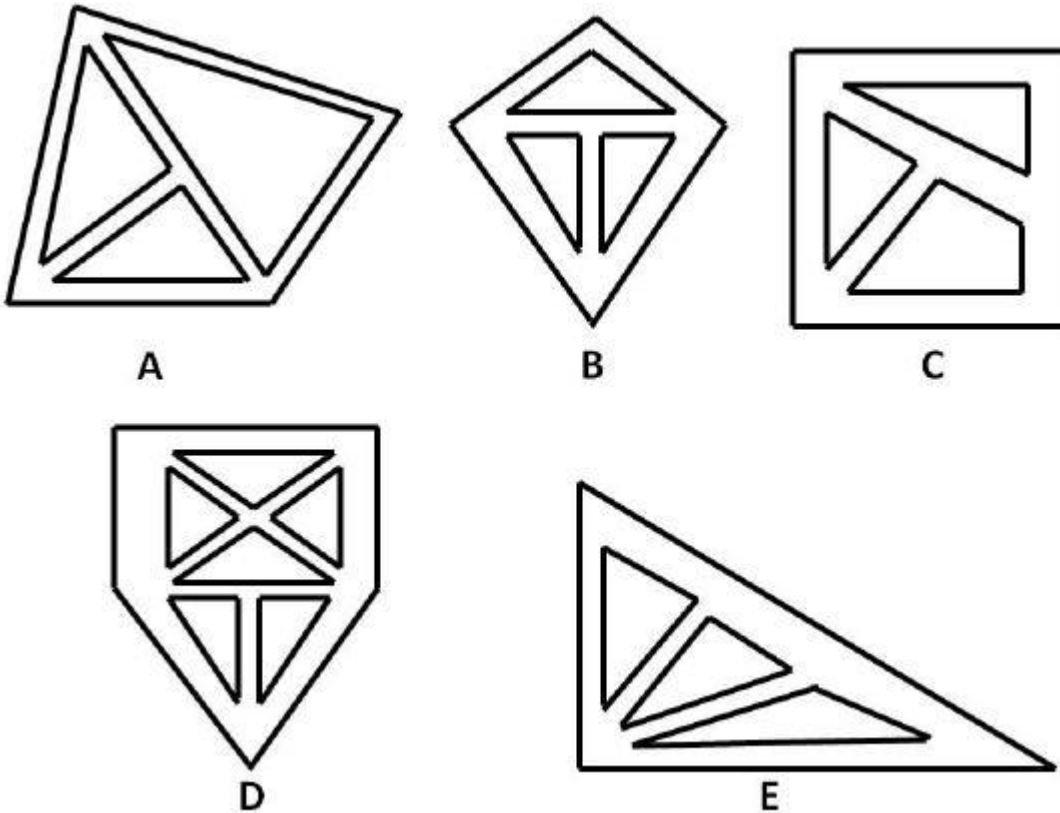


How many of these shapes contain interior reflex angles?

Choose one of the following answers:

- 1
- 2
- 3
- 4
- 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?

Choose one of A, B, C, D or E

11.

Carol has 23 photo albums, and each album contains 480 photos. How many photos does she have in total?

Choose one of the following answers:

- 12,160
- 10,840
- 11,120
- 12,060
- 11,040

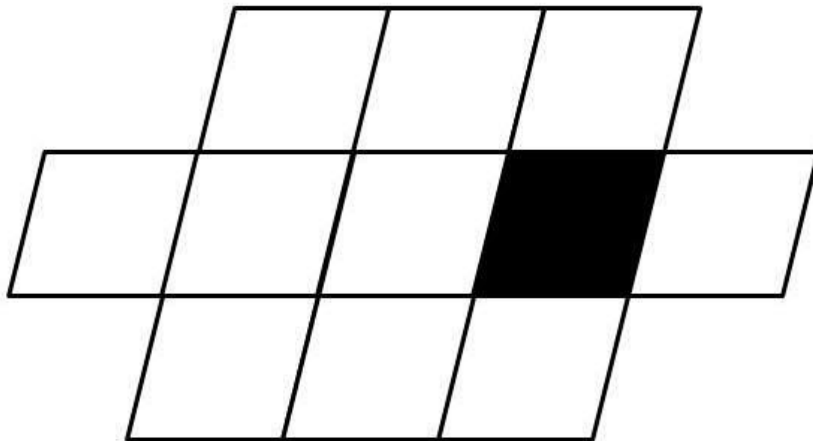
12.

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?

Choose one of the following answers:

- 17.5 m
- 18.2 m
- 17.4 m
- 18.5 m
- 19.4 m

13.



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

Choose one of the following answers:

- $2400 \text{ mm}^2$
- $0.24 \text{ cm}^2$
- $24,000 \text{ mm}^2$
- $2.4 \text{ cm}^2$
- $24 \text{ cm}^2$

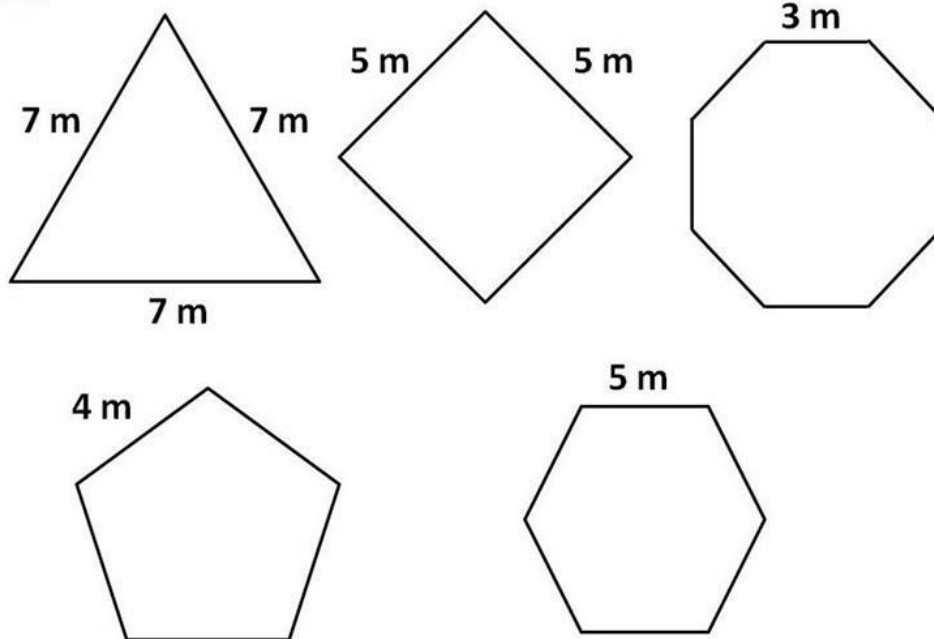


14.

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?

- $(3 \times 5) + (3 \times 2)$
- $(2 \times 3) + (2 \times 5)$
- $(5 \times 2) + (5 \times 3)$
- $2 \times (5 + 3)$
- $3 \times 5 \times 2$

15.

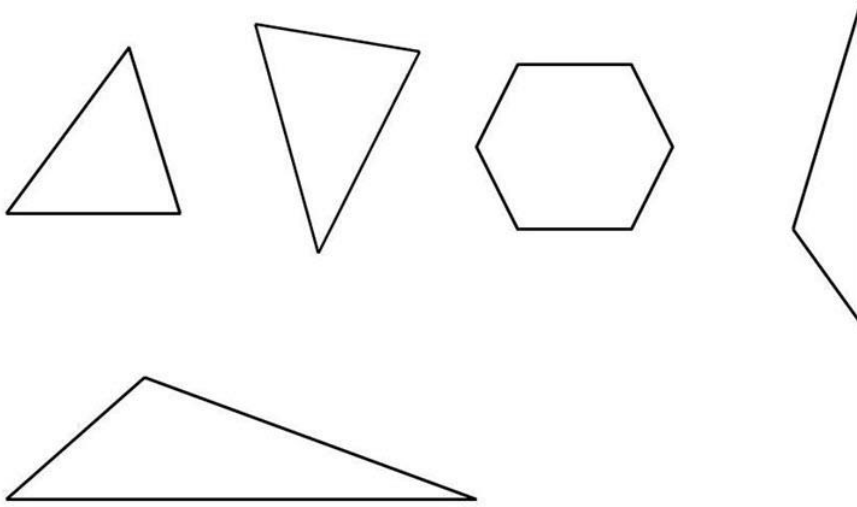


How many of these shapes have a perimeter greater than 20 metres?

Choose one of the following answers:

- 4
- 3
- 5
- 2
- 1

16.

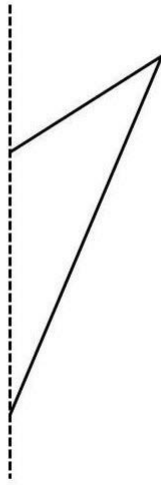


How many of these shapes contain obtuse angles?

Choose one of the following answers:

- 1
- 2
- 3
- 4
- 5

17.

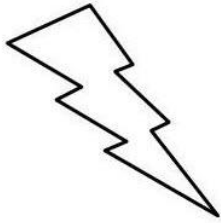


The diagram above shows part of a shape and its line of symmetry. What is the name of the complete shape?

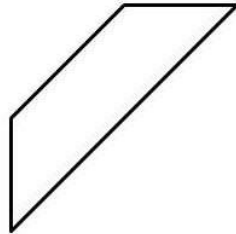
Choose one of the following answers:

- Triangle
- rectangle
- pentagon
- kite
- rhombus

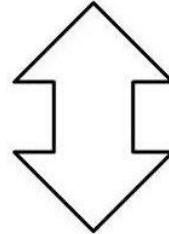
18.



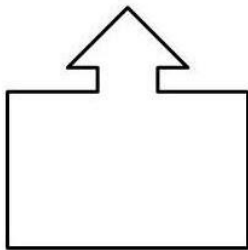
**A**



**B**



**C**



**D**



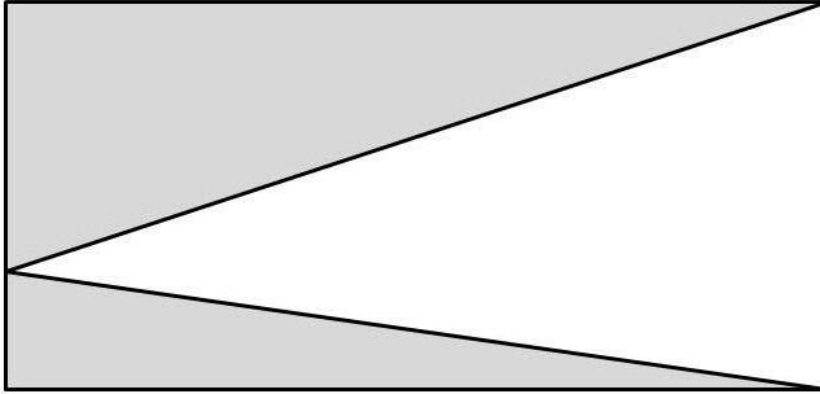
**E**

Which of these shapes have rotational symmetry?

Choose one of the following answers:

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

19.

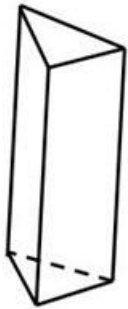


The area of the white triangle is  $46 \text{ cm}^2$ . What is the area of the shaded part of the rectangle?

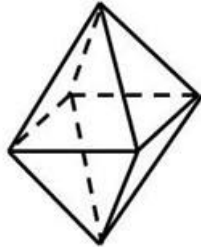
Choose one of the following answers:

- 56  $\text{cm}^2$
- 48  $\text{cm}^2$
- 54  $\text{cm}^2$
- 46  $\text{cm}^2$
- 58  $\text{cm}^2$

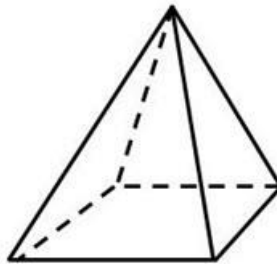
20.



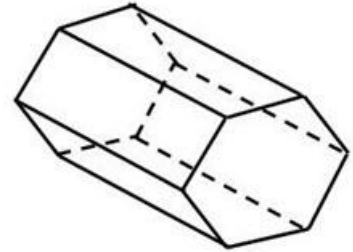
**A**



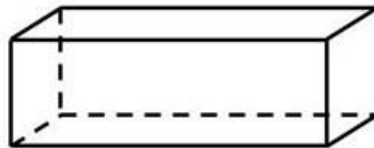
**B**



**C**



**D**



**E**

How many shapes have more vertices than faces?

Choose one of the following answers:

- 1
- 2
- 3
- 4
- 5