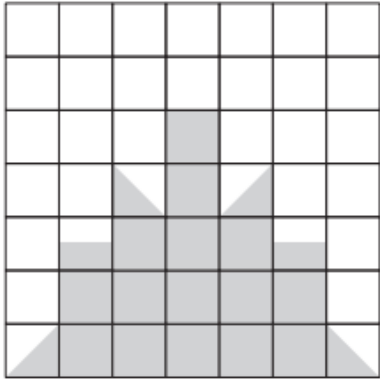


Area and Perimeter iRAT / tRAT

Question 1

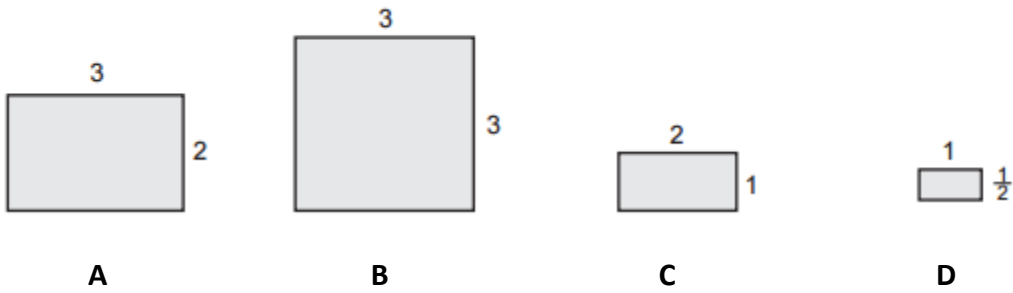


The shaded area on this grid, in square units, is closest to

- 15                      18                      20                      21
- A                      B                      C                      D

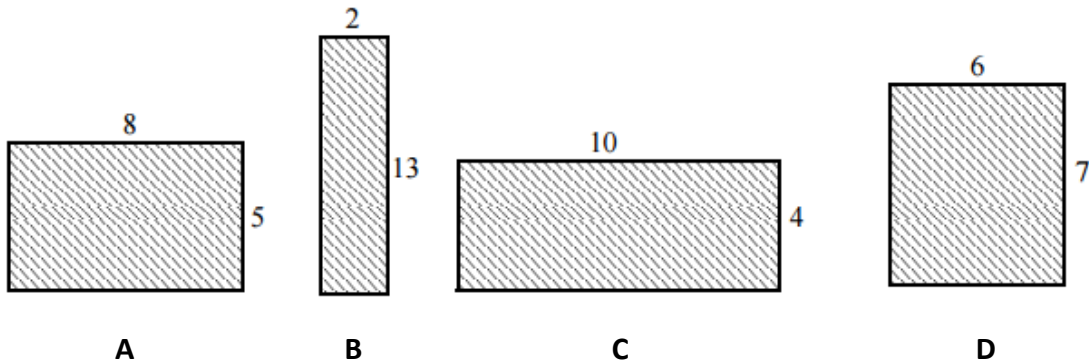
Question 2

Which shape has an area of 6 square units?



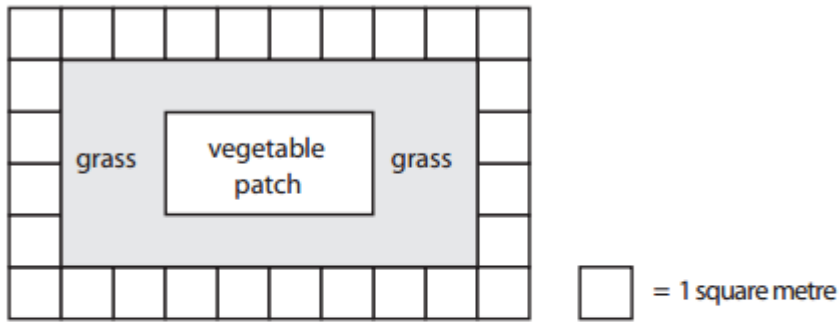
Question 3

Which one of these rectangles has an area of 40 square units and a perimeter of 26 units?



Question 4

This is a diagram of a garden.



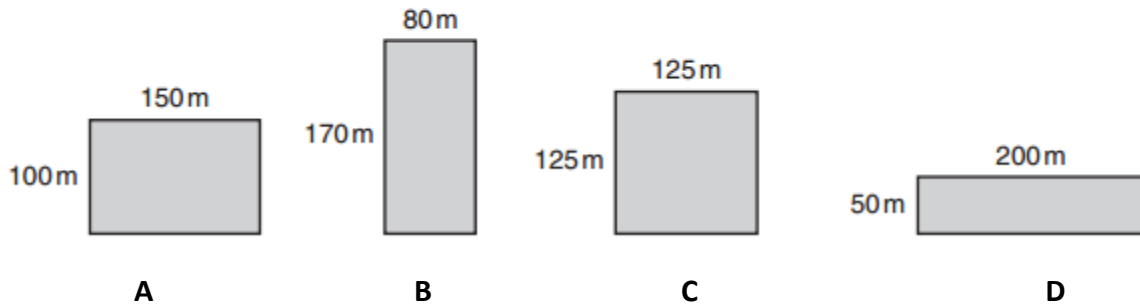
What is the area of the vegetable patch?

- A 4 square metres
- B 8 square metres
- C 16 square metres
- D 32 square metres

Question 5

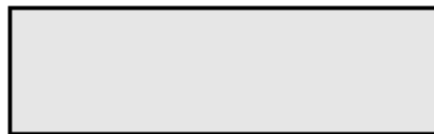
A farm has 4 paddocks.

Which paddock has the largest area?



Question 6

The area of this rectangle is  $112 \text{ cm}^2$  and its width is 8 cm.



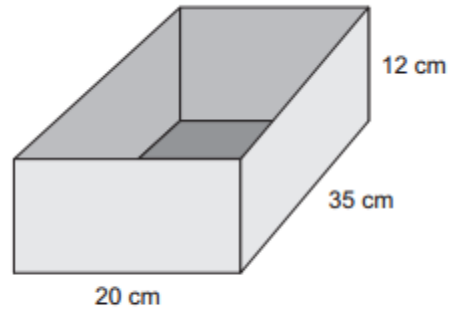
The perimeter of this rectangle

is....

- A 14cm
- B 22cm
- C 44cm
- D 56cm

Question 7

What area of cardboard is needed to make this open box?



1320 cm<sup>2</sup>

A

1360 cm<sup>2</sup>

B

2020 cm<sup>2</sup>

C

2720 cm<sup>2</sup>

D

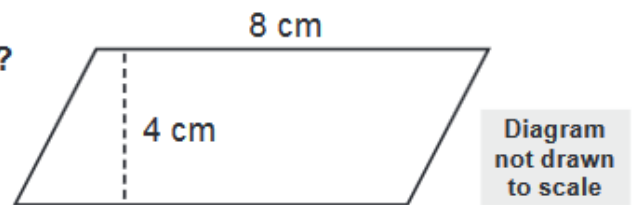
Question 8

Which of these are always equal in length?

- A the opposite sides of a trapezium
- B the opposite sides of a parallelogram
- C the diagonals of a trapezium
- D the diagonals of a parallelogram

Question 9

What is the area of the following parallelogram?



24 cm<sup>2</sup>

A

12 cm<sup>2</sup>

B

32 cm<sup>2</sup>

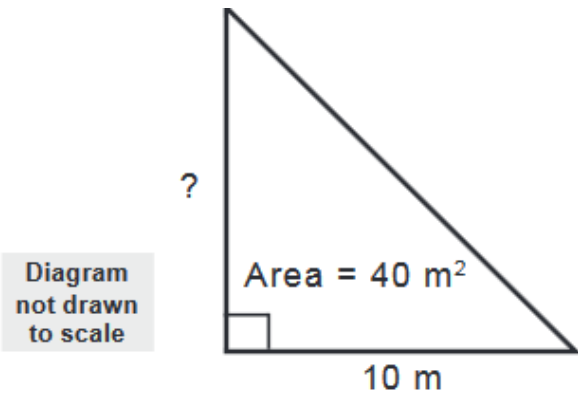
C

16 cm<sup>2</sup>

D

**Question 10**

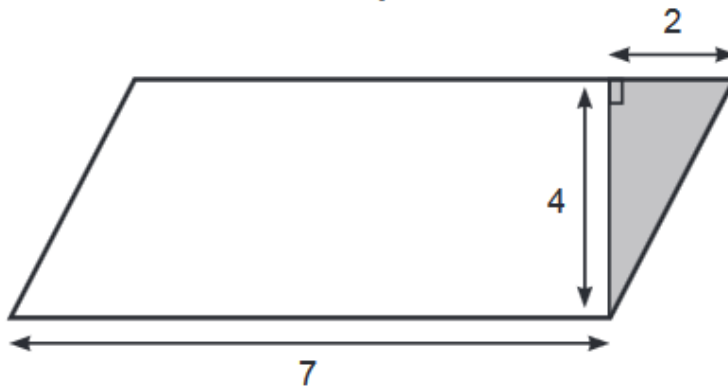
Use the area and length of the base in the following right angle triangle to find the missing height.



- A 4m      B 5m      C 8m      D 10m

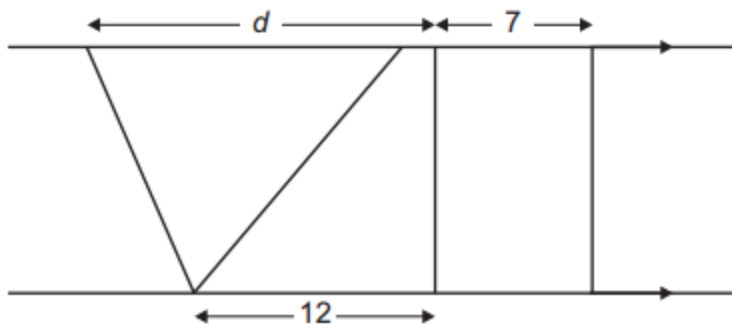
**Question 11**

What is the area of the unshaded quadrilateral?



- A 20      B 32      C 36      D 24

**Question 12**



The measurements in this diagram are all in centimetres.

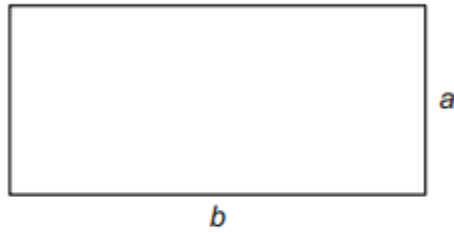
The areas of the triangle, trapezium and rectangle are all  $70 \text{ cm}^2$ .

What is the value of  $d$ ?

- A 9      B 12      C 14      D 16

**Question 13**

A square corner measuring  $x$  cm by  $x$  cm is cut out of this rectangular sheet of paper.

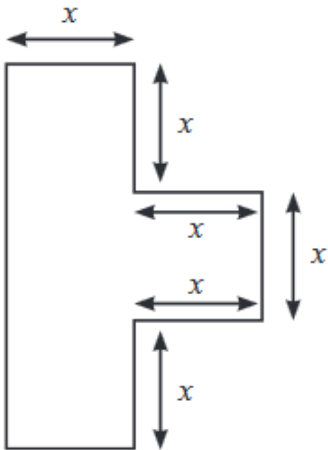


Which of these statements is true for the piece of paper that remains?

- A Its area is  $ab - x^2$  and its perimeter is  $2a + 2b$ .
- B Its area is  $(ab - x)^2$  and its perimeter is  $2(a+b)$ .
- C Its area is  $ab - x^2$  and its perimeter is  $2(a + b - x)$ .
- D Its area is  $(ab - x)^2$  and its perimeter is  $2a + 2b - 4x$ .

**Question 14**

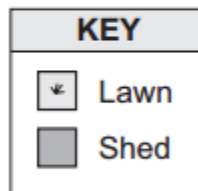
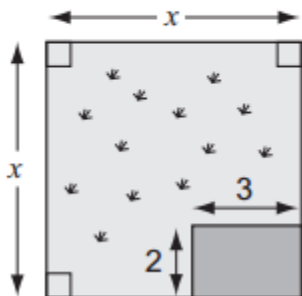
The following diagram represents Alex's bedroom. Which expression gives the area of the bedroom?



- A  $4x^2$
- B  $2x^2$
- C  $x^2$
- D  $4x$

**Question 15**

Sue drew this plan of a square block of land.  
All measurements are given in metres.



The area of the lawn in square metres is

- |           |           |            |            |
|-----------|-----------|------------|------------|
| $x^2 - 6$ | $x^2 + 6$ | $2x^2 - 5$ | $2x^2 - 6$ |
| A         | B         | C          | D          |