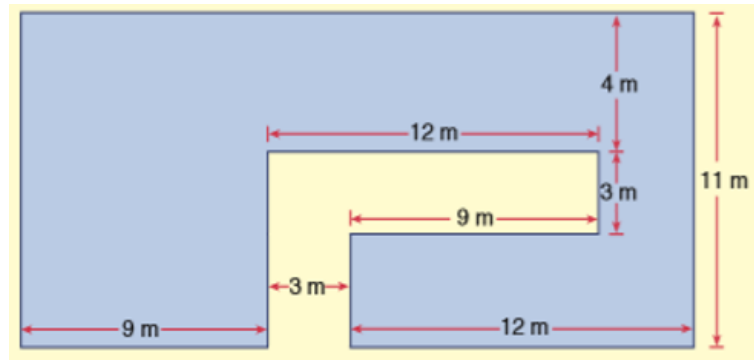


Category 1 Sample Question

1. What is the perimeter of the building whose plan is shown below?

- a) 120
- b) 102
- c) 94
- d) 91

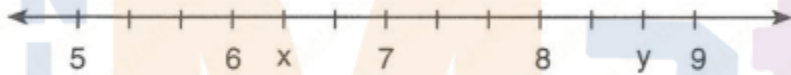


2. Find out the number in the series given below that doesn't fit the pattern?

8,4,12,5,18,9,27...

- A) 5
- B) 18
- C) 9
- D) 27

3.



The interval between 5 and 9 is divided into 12 equal parts. What is the value of $\frac{y}{x}$.

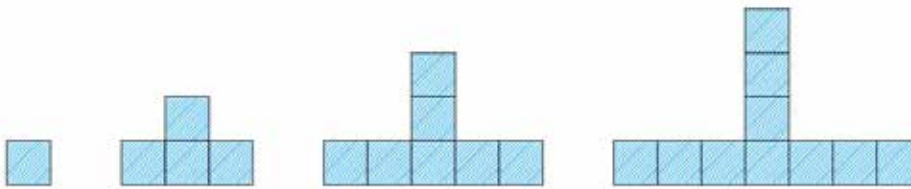
- A) $\frac{24}{19}$
- B) $\frac{23}{18}$
- C) $\frac{26}{19}$
- D) $\frac{21}{17}$

4.

If 4 times a number is decreased by 4, the result is 48.
 What is the number?

- A) 9
- B) 10
- C) 13
- D) 15

5.



In the picture above is given first four steps of a pattern. How many squares are needed to form the shape in step 9?

- A) 22 B) 25 C) 28 D) 31

6. Thales and Kochi follow different kinds of estimation rule to get an approximate result for the division given in the box shape. If it is known that, Thales rounds the divisor and dividend to nearest tenth, but Kochi rounds them to the nearest hundredth. Find the sum of their results.

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- A) 29 B) 31 C) 41 D) 33

7.

$$\frac{18}{45} = \frac{2}{\star} \text{ and } \frac{\blacktriangle}{76} = \frac{4}{19} \text{ is given.}$$

Find $\frac{\blacktriangle}{\star}$.

8. Express the given decimal number numerically: Forty-Eight millionth

a.	0.000048	c.	0.00000048
b.	0.0000048	d.	0.000000048

9. Find median and mode of the messages received on 9 consecutive days 15, 11, 9, 5, 18, 4, 15, 13, 17.

a.	13, 6	c.	18, 15
b.	13, 15	d.	15, 16

10. In these pyramids, the numbers in two squares are added to give the number in the one above. By doing this, we can fill in any blank squares. Complete these pyramids and find the value of n .

- a) 4
- b) 5
- c) 6
- d) 7

