What is the product of all the solutions of of the equation  $x+\dfrac{10}{x-4}=-1$  ?

Select one:

- a. -6
- ) b. -5
- O c. 6
- O d. 1

#### Question 2

In certain village, the ratio between adult men and adult women is 5:3 and the ratio between adult men and children is 7:2. What is the ratio between adults (men and women) and children?

- $\bigcirc \ \ \, \text{a.} \ \ \, 15:7$
- $\bigcirc \ \text{b.} \ 28:5$
- $\bigcirc \ \ \text{c.} \ \ \, 28:1$
- $\bigcirc \ \text{d.} \ 5:1$

What is the unit digit of the number  $324^3 + 324^0 + 324^2 + 324^5$ ?

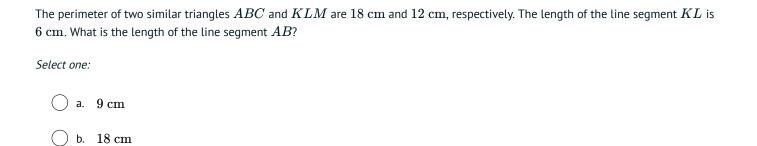
Select one:

- a. 3
- O b. 5
- O c. 4
- O d. 6

# Question 4

Five positive real numbers x, y, z, u and v are such that xy=2, yz=3, zu=4, uv=5. What is the value v/x?

- $\bigcirc \ \ \mathsf{a.} \quad \frac{3}{2}$
- $\bigcirc b. \quad \frac{15}{8}$
- $\bigcirc$  c.  $\frac{5}{6}$
- $\bigcirc \ \, \mathsf{d.} \quad \frac{4}{5}$



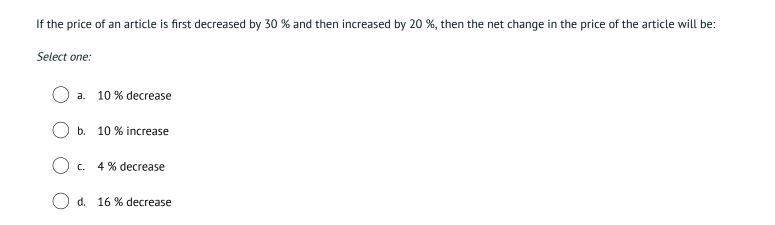
# Question 6

C. 12 cm

 $\bigcirc \ \text{d.} \ 4 \ cm$ 

The sum of three consecutive integers is  $15^{2020}$ . What is the middle number?

- $\bigcirc \ \text{a.} \ 5\cdot 15^{2019}$
- $\bigcirc$  b.  $3^{2020}$
- $\bigcirc$  c.  $5^{2020}$
- $\bigcirc \ \text{d.} \ 15 \cdot 5^{2019}$



# Question 8

The number  $8^{2020} + 8^{2021} + 8^{2022} + 8^{2023}$  is divisible by

- ( ) a. 11
- ( ) b. ;
- C 17
- O d. 7

We are given a regular hexagon ABCDEF. The area of the quadrilateral BCEF is  $4\,\mathrm{cm}^2$ . What is the area of the given hexagon in square centimetres?

Select one:



$$\bigcirc$$
 b.  $6\sqrt{2}$ 

$$\bigcirc$$
 c. 6

$$\bigcirc \ \, \text{d.} \ \, 5$$

#### Question 10

How many different positive odd integers can be formed using the digits 3, 5, 6 and 7 in which repetition of digits is not allowed?

Select one:



$$\bigcirc$$
 d. 24

#### Correct answers:

1 C 2 B 3 B 4 B

5 A 6 A 7 D 8 B

9 C 10 B