

01. Find the number which when added to $\frac{2}{3}$ result in $\frac{40}{51}$.

a. $\frac{4}{17}$

b. $\frac{5}{9}$

c. $\frac{4}{13}$

d. $\frac{2}{17}$

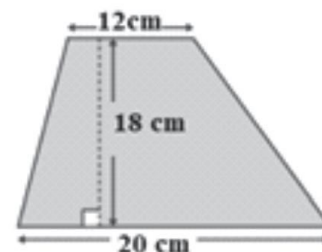
02. Two parallel sides of a trapezium are of lengths 12 cm and 20 cm respectively, and the distance between them is 18 cm. Find the area of the trapezium.

a. 288 cm^2

b. 328 cm^2

c. 242 cm^2

d. 265 cm^2



03. Megha purchased 10 dozens of pens at the rate of ₹210 per dozen. She sold each one of them at the rate of ₹21. What was her percentage profit?

a. 30%

b. 34%

c. 20%

d. 40%

04. The product of two numbers is $-\frac{20}{9}$. If one of the numbers is 4, find the other.

a. $-\frac{5}{9}$

b. $\frac{3}{11}$

c. $\frac{12}{39}$

d. $-\frac{9}{11}$

05. Find the value of $(15^0 - 21^0) \times 3^5 \times -2^{-5}$.

a. -7.59375

b. -0.000243

c. 0

d. 0.0000759

06. The least number that must be added to 65500 to make it a perfect square is

a. 25

b. 36

c. 49

d. 64

07. If x is ones digit and y is tens digit of a two digit number, then the cube of the number will be _____.

a. $(10x + y)^3$

b. $(10y + x)^2$

c. $(10y + x)^3$

d. $(10x + 10y)^3$

08. Divisibility test of 'x' is:

When the last digit of any number is doubled and subtracted from the rest of the digits in the original number, if we get 0 or x , then you know that the original number is also divisible.

The number 'x' is

a. 6

b. 7

c. 11

d. 13

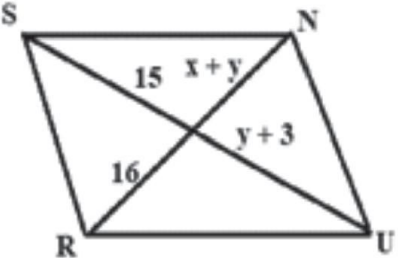
09. Choose the factors of $16m^2 + 40m + 25$ from the following options.

a. $(2m + 5)(2m + 1)$

b. $(4m + 5)^2$

c. $(m + 1)(4m + 5)$

d. $(2m + 5)^2$

10. Find the compound interest on ₹8000 for 1 year at 8% per annum, compounded half-yearly.
a. 652.8 b. 842 c. 783.4 d. 986.6
11. Suppose 2 kg of sugar contains 9×10^6 crystals. How many sugar crystals are there in 1.2 kg of sugar?
a. 5.4×10^6 crystals b. 10^6 crystals
c. 5.4 crystals d. None of these
12. What is the volume of a cuboid of length $8xy$, breadth $3xy$ and height xy ?
a. $24xy^2$ b. $24x^2y$ c. $24x^3y^2$ d. $24x^3y^3$
13. The following figure SRUN is parallelogram. Find x and y .
a. $x = 17, y = 8$
b. $x = 5, y = 18$
c. $x = 12, y = 9$
d. $x = 4, y = 12$
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14. If the capacity of a cylinder tank is 1848 m^3 and the diameter of its base is 14 m, the depth of the tank is
a. 8 m b. 12 m c. 16 m d. 18 m
15. If 40% of the people residing in a locality are Christian then the central angle of the sector representing their community in a pie chart would show
a. 140° b. 120° c. 144° d. 156°
16. Three numbers are in the ratio 1: 2: 3 and their H.C.F. is 12. The numbers are:
a. 4, 8, 12 b. 5, 10, 15 c. 10, 20, 30 d. 12, 24, 36

ANSWER KEY

1 d	2 a	3 c	4 a	5 c	6 b	7 c	8 b
9 b	10 a	11 a	12 d	13 d	14 b	15 c	16 d