

Grade: VII

Subject: Compulsory Mathematics

Time: 1 hour 30 minutes

Full Marks: 50

Pass Marks: 20

Group A [20 * 1 = 20]

1) Select the correct answer from the given options.

a) The greatest number that divides 12 and 18 without leaving remainder is:

- i) 3 ii) 6 iii) 9

b) Which of the following number is exactly divisible by 6:

- i) 456 ii) 441 iii) 455

c) What is the L. C. M. of 12 and 18?

- i) 24 ii) 36 iii) 60

d) If the L.C.M. of 8 and 12 is 24, then its H.C.F. will be:

- i) 2 ii) 4 iii) 6

e) What is the product of 4 and sum of 5 and 7?

- i) 48 ii) 36 iii) 24

f) What is the product of $(-3) \times (+9) \times (-2)$?

- i) (-52) ii) (-54) iii) (+54)

g) What is the quotient of $(-72) \div (+9)$?

- i) (+8) ii) (-8) iii) -64

h) 12/12 rose plants are planted along the length and breadth of a square garden. How many plants are there in the garden?

- i) 144 ii) 36 iii) 256

i) What is the square of 0.9

- i) 0.81 ii) 8.10 iii) 0.081

j) After simplifying of $18 - \{ 5 - (7 + 8) \}$ we get:

- i) 8 ii) 18 iii) 28

k) The simplified form of $\sqrt[3]{8 \times 27}$ is:

- i) 5 ii) 6 iii) 8

l) Centimeters are there in 3.6 meters.

- i) 360cm ii) 36cm iii) 3600cm

m) What is the ratio of 15 cm and 12cm. Add:

i) 4:5

ii) 5:4

iii) 5:3

n) What is the value of $\frac{5}{6}$ of 480?

i) 450

ii) 400

iii) 550

o) What is the value of 25% of 360?

i) 50

ii) 60

iii) 90

p) If $x=2$ and $y = 0$. What is the value of x^y .

i) 1

ii) 2

iii) 0

q) What is the product of $(-5ab) \times (-2abc) \times bc$.

i) $-10a^2b^2c^2$

ii) $10a^2b^3c^2$

iii) $-10a^2b^3c^2$

r) What is the quotient of $(28xy)^3 \div (4xy)^2$?

i) $7xy$

ii) $7(xy)^2$

iii) $8xy$

s) If x° and 75° make an angle halfturn, then the size of x° is:

i) 125°

ii) 115°

iii) 105°

t) The size of acute angles of a right-angled isosceles triangle is:

i) 90°

ii) 45°

iii) 30°

Group B [10 * 1 = 10]

2) Fill in the blanks

a) If the antecedent is 9 and consequent is 5, the ratio is-----.

b) The unit cost of a pen drive is Rs 450, then the cost of 4 pen drives = -----.

c) The expanded forms of $0.68 = \text{-----} + \text{-----}$.

d) The product of two integers of opposite sign is a ----- integer.

e) The expanded forms of $(m + n)^2$ is -----.

f) The product of $(a + b)(a - b)$ is -----.

g) If two opposite interior angles of an exterior angle of a triangle are 50° and 70° , then the size of the exterior angle is -----.

h) If p° and q° are a pair of co-interior angles between the parallel lines, then $p^\circ + q^\circ = \text{-----}$.

i) If a° and 115° are the opposite angles of a parallelogram, then $a^\circ = \text{-----}$.

j) The sum of the interior angles of a polygon with n number of sides is obtained by the formula -----

Group C [5 * 4 = 20]

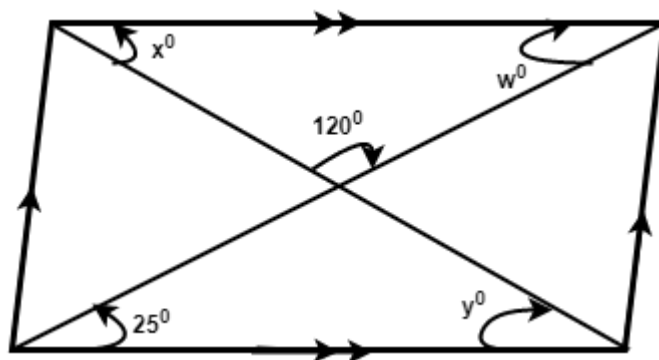
3) Simplify: $21 \div [5 + 16 \div 2\{6 - 18 \div (7 + 2)\}]$

4) 10 workers can finish a piece of work in 18 days. How many workers are required to finish the work in 12 days.

5) Simplify: $\frac{3}{10} + \left\{ \frac{4}{15} + \frac{2}{3} \left(\frac{16}{25} \div \frac{4}{5} + \frac{1}{10} \right) \right\}.$

6) Multiply: $(3x^2 + 2x - 4)$ by $(2x - 3).$

7) Calculate the unknown sizes of the angles of the adjoining parallelogram.



Best Wishes!!!