

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 $28(xy)^3 \div 4(xy)^2$?

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]

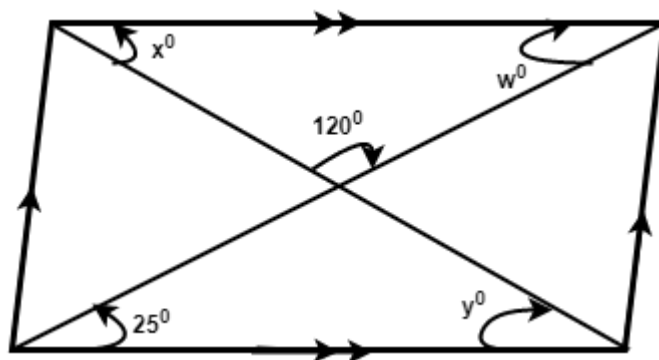
3) Simplify: $21 \div [5 + 16 \div 2\{6 - 18 \div (7 + 2)\}]$

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!!!