

Class: 6

Sub: Math 'T'

Final term exam

2077

Full mark: 100

Time:

Pass mark: 40

Attempts all the questions.

Group 'A'

(16×2=32)

Q.N. 1 If $P = \{a, b, c, d, e\}$ and $Q = \{a, e, i, o, u\}$. Find $P \cup Q$ and illustrate it in diagram.

b. Simplify: $-10 \times 9 + 63 \div 7 - 20$

c. The marks obtained by 5 students are 12, 10, 15, 18 and 16, find their average marks.

d. Find the cube root of 216.

e. If 5, 4, 15 and x are in proportion, find the value of x .

f. Solve: $-\frac{x-4}{6} = \frac{1}{2}$

g. Multiply: $-(x+3)(x-3)$

h. If the perimeter of a square is 24 cm, find its area.

i. Which one is the best buy, 2 pens for Rs. 25 or 3 pens for Rs. 36?

j. Add: $-5y-2$ and $2y+7$

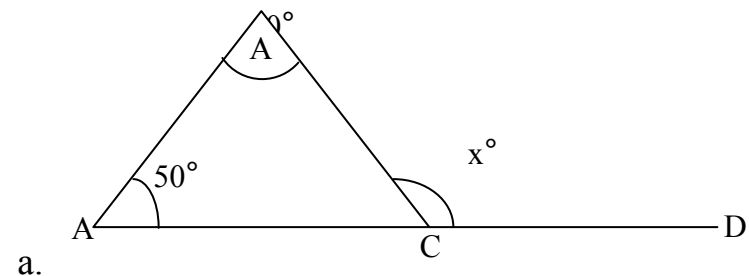
k. Simplify: $-6m+2n+n-4m$

l. If $x=3$ and $y=2$, find the value of: -

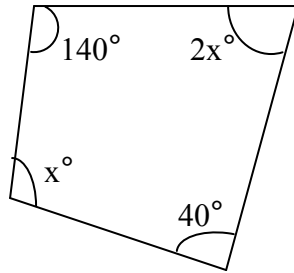
i. x^2-y^2

ii. $2(x+y)$

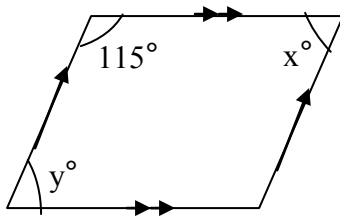
m. In the given triangle, find x° .



n. From the adjoining figure, find the unknown angles of the quadrilateral.



o. Find the unknown angles of parallelogram.



P. Which formula do you use to calculate profit percent and loss percent?

Group 'B'

($17 \times 4 = 68$)

Q.N. 2 If $A = \{1, 3, 5, 7, 9\}$ and $B = \{2, 3, 5, 7, 9, 12\}$, Find $A \cup B$ and $A \cap B$. Show them in diagrams separately.

Q.N. 3 Write the numeral in short form and write the number name.

$$2 \times 10^9 + 5 \times 10^7 + 10^4 + 9 \times 10^2$$

Q.N. 4 Simplify: $- 72 \div 8 \{180 \div 4 \{10 + (15 - 45 \div 9 \times 2)\}$

Q.N.5 Find the greatest number of students to whom 24 pens and 32 pencils can be equality divided.

Q.N. 6 If 12 men can finish a piece of work in 10 days, in how many days would 8 men finish the same work?

Q.N.7 The ration of length and breadth of a room is 4:3. If the room is 12m long, find its breath.

Q.N. 8 A man earns Rs. 15000 in a month. If he spends 20% on food and 10% on his children's education,

a. What is his total expenditure?

B,. How much does he save in a month?

Q.N. 9 The marked price of a watch is Rs. 700. If 10% discount is given and 10% VAT is charged to the customer,

a. Calculate the selling price after discount.

b. How much should a customer pay for it with VAT?

Q.N. 10 Divide: $-x^2+7x+12$ by $x+4$

Q.N. 11 Construct a rectangle ABCD in which $AB=5.5$ cm and $BC=4.2$

Q.N. 12 Construct the following angles by using protractor.

a. 85° b. 110° c. 145° d. 165°

Q.N. 13 Classify the triangle according to sides and angles.

Q.N. 14 Multiply: $-(x+1)(x^2+x+1)$

Q.N. 15 If $a=(2x-5)$ and $b=(2x+5)$, show that $\frac{ab+25}{4} = x^2$

Q.N. 16 Solve: $-\frac{2x+4}{2} = \frac{x+2}{3}$

Q.N. 17 Simplify: $-\frac{1000}{800} \div \frac{2500}{4000} \times \frac{500}{6000}$

Q.N. 18 The number of students in the primary level of a school are given below. Draw a bar graph to show the numbers.

Classes	1	2	3	4	5
No. of Students	35	30	40	25	20

The End