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Tender Heart High School, Sec-33B, Chandigarh

Class - VI
Subject - Mathematics

Date - 24.02.2025
Teacher - Ms. Sushma

Revision Worksheet

Q1. Write the following sets in Roster form

(i) A = Set of natural numbers less than 10.
(ii) B = The letters of the word 'PILLOW'.
iii) C = Set of first five prime numbers.

Q2. Write each of the following sets in the Set builder form:-

(i) A = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}.
(ii) B = {Sunday, Saturday}.
iii) C = {1, 3, 5, 7, 9, ...}.

Q3. Which of the following pairs of sets are equivalent?

(i) A = The set of the letters in the word EXAMINATION.
B = The set of the letters in the word ARITHMETIC
(ii) C = {2, 4, 4, 5}. D = {a, b, c}.

Q4. Write the cardinal number of each set:-

(i) P = {x : x is a whole number, x < 11}.
(ii) A = {x : x is a prime factors of 72}.
(iii) B = {x : x is an odd prime number, x < 17}.

Q5. Which of the following pairs of sets are equal?

(i) $A = \{x : x$ is a letter of the word 'ALLOY'$\}$.
$B = \{x : x$ is a letter of the word 'LOYAL'$\}$.

(ii) $C = \{x : x$ is a counting number $2 < x < 4\}$.
$D = \{x : x$ is a prime number, x is odd$\}$.

Q6. Write down the coefficient of x in the following:-

(i) $3x$ (ii) $-2xy^2$
(iii) $4xyz$ (iv) $7xy^2z^3$

Q7. If $a=3$, $b=-1$ and $c=2$, then find the value of $\frac{3ab-2b^2}{2ac+c^2}$.

Q8. Write the following in product form.
(i) $5x^2yz^3$ (iii) $2m^3n^5$
(ii) $7p^3q^4r^5$ (iv) $3a^2b^3c^4$.

Q9:- Solve the following equations:-

i) $5(y-1) = 3(2y-5) - (1-3y)$

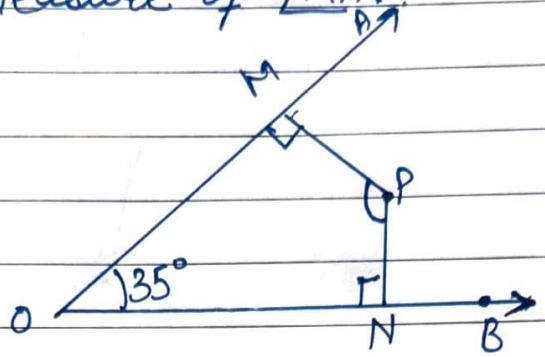
ii) $2(x-1) - 6x = 10 - 2(x-4)$

Q10:- Construct the angles of $60°$, $30°$, $45°$, $90°$, $120°$ by using ruler and compasses.

Q11. Find the no. of sides of a polygon whose sum of interior angles is $1260°$

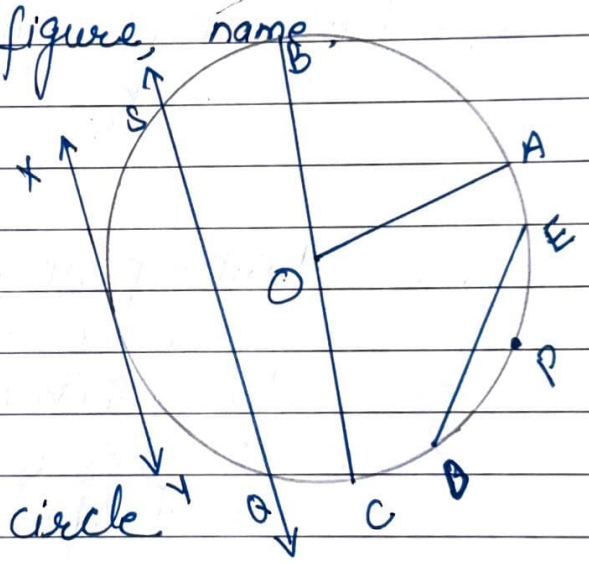
Q12. Find the sum of interior angles of a polygon with 10 sides.

Q13. In the adjoining figure, P is a point in the interior of $\angle AOB$. $PM \parallel OA$ and $PN \perp OB$. If $\angle AOB = 35°$, what is the measure of $\angle MPN$?



Q14. Using the adjoining figure, name

(i) A chord
(ii) A radius
(iii) A diameter
(iv) A secant
(v) A Tangent
(vi) An arc
(vii) A major arc of the circle



Q15. The area of a square and a rectangle are equal. If each side of the square is 20cm and the breadth of the rectangle is 16 cm, find the:-

(i) Area of the rectangle
(ii) Length of the rectangle
(iii) Perimeter of the rectangle

Q16. Raju is going on his scooter at a speed of 42 km/hr. How much time will he take to cover 875 metres?

Q17. A car is running at 20 m/s. How much distance does it cover in 2 hr 20 minutes?

Q18. Fill in the blanks:-

(i) A cuboid has _____ pairs of opposite faces.
(ii) The triangular pyramid is also known as. _____
(iii) A hexagonal prism has _____ vertices and _____ edges.

Q19. Construct a ΔABC in which $AB = AC = 5$ cm and $BC = 4.5$ cm. Draw all its lines of symmetry. How many such lines are there?

Q20. Find the mean of 22, 24, 26, 28, 30, 32, 34, 36.

Q21. The weights (in kg) of 8 children are:-
13.4, 10.6, 12.7, 14.2, 14.3, 15, 16.5, 9.8.
Find the median weight.

Q22. Draw a line segment $AB = 5.5$ cm. Using ruler and compasses, draw the Lar bisector of AB.