MANVI PUBLIC SCHOOL

Subject : Mathematics
Worksheet
Class :VII

1. Fill in the blanks:
(a) The sum of two negative integers is _____
(b) The opposite of 'A deposit of Rs 200' will be _____
(c) A line that intersect two or more lines at distinct points is called _____
(d) If two adjacent angles are supplementary, then they form a _____
(e) _____ is the identity for addition of rational numbers.

2. Subtract the sum of: $-3x^3y^2 + 2x^2y^3$ and $-3x^2y^3 - 5y^4$ from $x^4 + x^3y^2 + x^2y^3 + y^4$.

3. If x = -4/9 , y = 5/12 , z = 7/18; find the value of :
$x \div y-[1/xy - y(2x/y \div x/2y) - xyz(1/x + 1/y + 1/z)]$

4. Evaluate: $\dfrac{15^4 \text{ X } 18^3}{3^3 \text{ X } 5^2 \text{ X } 12^2}$

5. Two cross roads each of width 5m, run through the center of a rectangular park of length 70m and breadth 40m.
(a) Find the area of roads
(b) Find the cost of constructing the roads at Rs. 105 per m^2.
(c) find the area of remaining park.

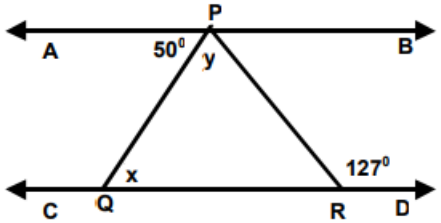
6. In what time will Rs.1860 amount to Rs.2278.50, if the simple interest is calculated at the rate of 9% per annum?

7. The cost of fencing a circular field at the rate of Rs. 24 per metre is Rs 5280. The field is to be ploughed at the rate of Rs. 0.50 per m^2. Find the cost of ploughing the field.

8. Five years ago, a man was seven times as old as his son. Five years hence, the father will be three times as old as his son. Find their present ages.

9. An elevator descends into a mine shaft at the rate of 5 metre per minute,
(a) What will be its position after one hour?
(b) If it begins to descend from 15m above the ground, what will be its position after 45 minutes?

10. In the given figure, AB ||CD, ∠APQ = 50°, ∠PRD = 127°, find the value of 'x 'and 'y'.



11. Solve for x: $\frac{x+2}{6} - \left(\frac{11-x}{3} - \frac{1}{4}\right) = \frac{3x-4}{12}$

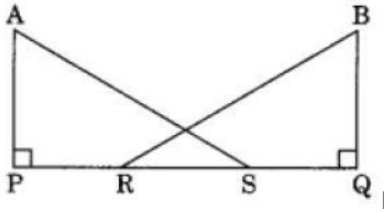
(ii) $\frac{2}{5}(2x - 1) = \frac{4}{5}(3x - 5)$

12. The following observations have been arranged in ascending order. If the median of the data is 63, find the value of x.

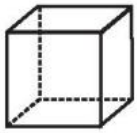
29, 32, 48, 50, x, x+2, 72, 78, 84.

13. Answer the following:
(a) What percent of 2/7 is 1/35?
(b) If 40% of a number is 256, then what is the 25% of that number?
(c) What per cent is 55m of 2Km?
(d) Find profit or loss per cent if an article of cost Rs 3000 is sold for Rs 2500?

14. In the given figure, AP = BQ, PR = QS. Show that $\triangle APS \cong \triangle BQR$



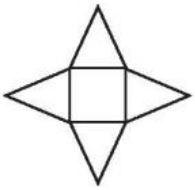
15. Match the following

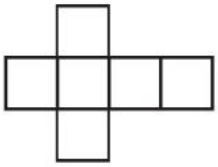
(a) 

(b) 

(c) 

(d) 

(i) 

(ii) 

(iii) 

(iv)