Class Notes	
Class: VII	**Topic: PRACTICE WORKSHEET(8, 9, 10, 13, 15)**
Subject: MATHEMATICS	

PRACTICE WORKSHEET- 1

Find the correct option

1. **The angles of a triangle are in the ratio 1: 1: 2. What is the largest angle?**
   (a) 90° (b) 45° (c) 30° (d) 60°
2. **0.1 as per cent is**
   (a) 1% (b) 10% (c) 100% (d) 0.1%
3. **Meenu purchased an item for ₹ 800 and sold the same for ₹ 1000. The gain percentage is**
   (a) 25% (b) 20% (c) 40% (d) 50%
4. **What is $12\frac{1}{2}$ % of 200?**
   (a) 25 (b) 12 (c) 40 (d) 100
5. **At what rate per cent per annum will ₹ 1650 amount to ₹ 2046 in 3 years?**
   (a) 8% (b) 4% (c) 6% (d) $16\frac{2}{3}$%
6. **Which power of 8 is equal to 2^6?**
   (a) 3 (b) 2 (c) 1 (d) 4
7. **In standard form 22 crore is written as**
   (a) 22×10^7 (b) 22×10^8 (c) 2.2×10^8 (d) 2.2×10^7
8. **Usual form of the expression 9×10^{-5} is given by ..... .**
   (a) 0.00009 (b) 0.000009 (c) 90×10^{-4} (d) 0.09×10^{-3}
9. **A triangle can be constructed by taking two of its angles as**:
   (a) 110°, 40° (b) 70°, 115° (c) 135°, 45° (d) 90°, 90°
10. **A triangle can be constructed by taking its sides as:**
    (a) 1.8 cm, 2.6 cm, 4.4 cm (b) 2 cm, 3 cm, 4 cm
    (c) 2.4 cm, 2.4 cm, 6.4 cm (d) 3.2 cm, 2.3 cm, 5.5 cm
11. **How many perpendicular lines can be drawn to a line from a point not on it?**
    (a) 1 (b) 2 (c) 0 (d) Infinite
12. **The idea of equal alternate angles is used to construct which of the following?**
    (a) A line parallel to a given line (b) A triangle (c) A square (d) Two triangles
13. **The denominator of the rational number – 9 is**
    (a) -9 (b) 9 (c) -1 (d) 1
14. **If $\frac{-7}{11} = \frac{14}{?}$, then? =**
    (a) 11 (b) -11 (c) 22 (d) -22
15. **The rational number $\frac{-21}{28}$ in standard form is**
    (a) $\frac{-3}{4}$ (b) $\frac{3}{4}$ (c) $\frac{3}{7}$ (d) $\frac{-3}{7}$
16. **The shape of shadow of a cylindrical pipe when seen under the lamp of an overhead projector is ----**
    (a) circle (b) triangle (c) rectangle (d) pentagon
17. **$\frac{17}{11} - \frac{6}{11} =$**
    (a) 1 (b) -1 (c) 6 (d) 3
18. **$\frac{2}{9} \times \frac{27}{8} =$**
    (a) $\frac{4}{3}$ (b) $\frac{3}{4}$ (c) 3 (d) 4
19. **In the standard form of a rational number, the denominator is always a**
    (a) 0 (b) negative integer (c) positive integer (d) 1

20. **To reduce a rational number to its standard form, we divide its numerator and denominator by their**

(a) LCM (b) HCF (c) product (d) multiple

SUBJECTIVE QUESTIONS

1. **Reena's mother said, to make *idlis*, you must take two parts rice and one part *urad dal*. What percentage of such a mixture would be rice and what percentage would be *urad dal*?**

2. **An item was sold for ₹ 540 at a loss of 5%. What was its cost price?**

3. **₹7,000 is borrowed at 3.5% rate of interest p.a. for 2 years. Find the amount to be paid at the end of the second year.**

4. **. Find the value of:**

i) $2° \times 3° \times 4°$

ii) $(7° \div 3°) \times (8° - 5°)$

iii) $4° \times 6° + 100°$

iv) $(2° + 3°) \times 4°$

5. **Simplify** **a)** $\frac{3^5 \times 10^5 \times 25}{5^7 \times 6^5}$ b) $\frac{12^4 \times 9^3 \times 4}{6^3 \times 8^2 \times 27}$

6. **Compare the following numbers**:

2.7×10^{12} ; 1.5×10^8

7. **Construct a ΔPQR in which m∠P = 60° and m∠Q = 30°, QR = 4.8 cm.**

8. **Construct ΔLMN, right-angled at M, given that LN = 5 cm and MN = 3 cm**

9. **Construct an obtuse angled triangle which has a base of 5 cm and base angles of 30° and 110°.**

10. **Express** $\frac{3}{4}$ **as a rational number with denominator:**

(i) 36 (ii) – 80

11. **Express each of the following rational numbers in its standard form:**

(i) $\frac{-12}{20}$ (ii) $\frac{-14}{35}$

12. **If two cubes of dimensions 2 cm by 2 cm by 2 cm are placed side by side, what would be the dimensions of the resulting cuboid ?**

13. **Represent the following rational numbers on a number line:**

(i) $\frac{-3}{7}$ (ii) $\frac{7}{8}$

14. **Construct a triangle ABC, given that AB = 5 cm, BC = 6.5 cm and AC = 8 cm.**

15. **Draw the net of**

a) cube **b) cylinder** **c) cone** **d) square pyramid**

CLASS NOTES

Class: VII	Topic: REVISION WORKSHEET – 2 (Based on chapter 9,11,12,14)
Subject: MATHEMATICS	

REVISION WORKSHEET-2

Find the correct option:

1. What would be the value of M if $\frac{5}{8}$ and $\frac{M}{32}$ are equivalent rational numbers.
   a. 24
   b. 20
   c. 29
   d. 40
2. Identify the odd one.
   a. $\frac{7}{-3}$
   b. $\frac{-7}{3}$
   c. $\frac{5}{6}$
   d. $\frac{14}{-6}$
3. What is the value of $\frac{5}{13} - \frac{-8}{26}$?
   a. $\frac{-3}{26}$
   b. $\frac{-1}{2}$
   c. $\frac{-3}{13}$
   d. $\frac{9}{13}$
4. How many rational numbers are there between two rational numbers?
   a. 1
   b. 0
   c. Unlimited
   d. 100
5. In the standard form of a rational number the denominator is always a ?
   a. 0
   b. Positive integer
   c. Negative integer
   d. 1
6. A wire is bent to form a square of side 22 cm. If the wire is rebent to form a circle, its radius is.
   a. 22 cm
   b. 14 cm
   c. 11 cm
   d. 7 cm
7. Area of a rectangle and the area of a circle are equal. If the dimension of the rectangle are 14 cm × 11 cm , then radius of the circle is
   a. 21 cm
   b. 10.5 cm
   c. 14 cm
   d. 7 cm
8. Area of a right angled triangle is $30cm^2$ If its smallest side is 5 cm. Then its hypotenuse is…
   a. 14 cm
   b. 12 cm

c. 13 cm
d. 4cm

9. 2 hectares=_____ m^2
   a. 20000
   b. 2000
   c. 10000
   d. 1000
10. If the length and breadth of a rectangle are doubled then its perimeter is_____
   a. Halved
   b. Doubled
   c. Increases by 4 times
   d. Remains the same
11. An algebraic expression containing three terms is called a:
   a. Monomial
   b. Binomial
   c. Trinomial
   d. All of these
12. The sum of x^4- xy +$2y^2$ and –x^4+ xy+$2y^2$
   a. Monomial
   b. Binomial
   c. Trinomial
   d. Tetranomial
13. The substraction of 5 times of y from x is:
   a. 5x-y
   b. y-5x
   c. x – 5y
   d. 5y- x
14. 123x^2y – 138x^2y is a like term of:
   a. 10xy
   b. -15xy
   c. -15y^2x
   d. 10x^2y
15. The value of 3 x^2 – 5x + 3 when x=1 is:
   a. 1
   b. 0
   c. -1
   d. 11
16. Line of symmetry is a line that
   a. Divides the object into two equal and identical halves
   b. Divides the object into two unequal halves
   c. Divides the object more than two equal parts
   d. None of the above
17. A regual polygon has
   a. All sides of equal length
   b. All angles of equal measure
   c. Both a and b
   d. None of the above
18. Which of the following letters have rotational symmetry of order more than 1?
   a. O
   b. N
   c. Z
   d. All of the above
19. If the figure regains its shape after rotation by every 60^o, rotational symmetry will be
   a. 2

b. 3
c. 4
d. 6

20. The letter Z has
    a. Only line symmetry
    b. Only rotational symmetry
    c. Both line symmetry and rotational symmetry
    d. Neither line symmetry nor rotational symmetry

SUBJECTIVE QUESTIONS

1. The rainfall of a particular place is $\frac{7}{16}$ cm and $\frac{9}{4}$ cm on Monday and Tuesday, respectively.
   a) What is the total amount of rainfall?
   b) On which particular day, was the rainfall higher?
2. A person wants to buy an iron box, which is on sale. The original cost of the iron box was Rs. 800. If the sale cost is $\frac{3}{4}$ of the original cost, find the following:
   a) What will be the cost of 7 such iron boxes?
   b) What is the difference between the original cost and the sale cost?
3. Divide the product of : $12\frac{3}{5}$ and $1\frac{2}{3}$ by $\frac{14}{3}$.
4. A rectangular park has length 30 m and width 20 m. two cross roads ech of width 4 m which are perpendicular to each other run through the centre of the rectangular park.
   a) Find the area of the roads.
   b) Find the cost of constructing the roads at the rate of Rs. 100 per m^2.
5. Find the circumference of a circular plate having an area of 154 cm^2.
6. A wall of a room is of dimension 5m × 4m. It has a window of dimension 1.5m × 1m and a door of dimension 2.25m × 1m. Find the cost of white washing the wall at the rate of Rs 25 per sq.m.
7. Pizza factory has come out with two kinds of pizzas. A square pizza of side 45 cm costs Rs. 150, and a circular pizza of diameter 50 cm cost of Rs. 160. Which pizza is a better deal?
8. Priyanka took a wire and bent it to form a circle of radius 14 cm. She bent it into a rectangle with one side 24 cm long. What is the length of wire? Which figure encloses more area? The circle or the rectangle ?
9. What should be subtracted from $2x^3$- $3x^2$y + 2xy^2+ $3y^3$ to get x^3- $2x^2$y + 3xy^2+ $4y^3$?
10. Rohan's mother gave him Rs 5(xy^2+ 2). Out of these total money he spent Rs (10 – 3xy^2) on his birthday party. How much money is left with him?
11. Simplify the expressions given below and find their value for t = $\frac{2}{3}$, s = $\frac{-1}{3}$.
    a) 3t – 2s – 2t + 3s b) $9t^2 + 9s^2 - 6t^2 - 3s^2$
12. Arun has a square shaped plot of side m units and another triangular shaped plot with base and height each equal to m units.
    a) What is the expression for finding the total area of the plot ?
    b) Find the total area of the plot?
13. Draw, wherever possible, a sketch of
    a) a triangle with both line and rotational symmetries of order more than 1.
    b) a triangle with only line symmetry and no rotational symmetry of order more than 1.
    c) a quadrilateral with line symmetry but not a rotational symmetry of order more than 1.
    d) the quadrilaterals which have both line and rotational symmetry of order more than 1.
14. What letters of the English alphabet have reflectional symmetry about
    (a) a vertical mirror
    (b) a horizontal mirror

(c) both horizontal and vertical mirrors.

15. Fill in the blanks

Shapes	Centre of rotation	Order of rotation	Angle of rotation
Square			
Rectangle			
Rhombus			
Equilateral triangle			
Regular pentagon			
Circle			
Semi-circle			