**Dr. Virendra Swarup Education Center , Panki, Kanpur**

**Revision Sheet**

**Class- VII**

**MATHEMATICS**

Q1. Put >, < or =

1. 22 + (- 197) \_\_\_\_\_ 38 + ( - 160)
2. – 37 + ( - 39) \_\_\_\_\_ - 59 – (- 22)

Q2. A bus travels at a speed of 66 km in 3 hours and a train travels at 120 km in 2 hours . Find the ratio of their speed.

Q3. A coin is tossed 250 times and tail is obtained 54 times. On tossing a coin at random. Find the probability of getting a) a head b) a tail

Q4. From the sum of 7$y^{2}+ 9 yz , $-23$y^{2}$+ yz - 3$z^{2}$and 5yz - 8$z^{2}$**,** subtractthe sum of $2y^{2}$- $z^{2}$and - 6$y^{2}$+ yz + $z^{2}$**.**

Q5. Through a rectangular field of length 120 m and breadth 80 m, two cross roads are constructed which are parallel to the sides and cut each other at right angles through the centre of the field. If the width of each road is 5 m, find

1. the area covered by the roads.
2. The cost of constructing the roads at the rate of Rs 75 per square meter.

Q6. $∆$ ABC is right angled at A and AD is perpendicular to BC. If AC =12 cm and BC = 13 cm, find:

1. The area of $∆$ ABC.
2. The length of altitude AD.

Q7. In the adjoining figure, show that $∆ ABC≅∆DBC$**.** Hence, find the values of x and y.

 A

 B C

 D

 Here, ABC = (2y+6)$°$, DBC= 56$°$, ACB= 40$°$ and BDC= x. Find x.

Q8. Three cubes each with edge 2 units are placed side by side to form a cuboid. Find the dimensions of the cuboid so formed and draw an isometric sketch of this cuboid.

Q9. Find the mean age and median age of six students whose ages ( in years ) are: 15, 13, 16 13, 14, 16.

Q10. Draw a line, say AB, take a point P outside line AB. Through P, draw a line parallel to line AB using ruler and compass only.

Q11. By using ruler and compass, construct a $∆$ ABC with BC = 5.5 cm, AC = 4 cm and C = 60$°$.

Q12. Radhika bought a pair of shoes and saved Rs. 20 when a discount of 25% was given. What was the price of the pair of shoes before discount.

Q13. A line segment of 1 m length is divided into two parts such that the first part is $\frac{1}{3}$ of second part. Find the lengths of two parts in centimeters.

Q14. How much does $75p^{2}$ - 33p + 9 exceed 29 $p^{3}- 2p^{2}$ + 19 p – 120.

Q15. Find the sum of integers -91, 233, -84, 75, -183, -37, 28, 12.

Q16. Simplify the following expressions: (i) $\frac{4}{5}$ of ($ 5\frac{1}{6}-6\frac{5}{8} )$ (ii) $(1\frac{2}{3}- 2\frac{5}{6}$) of $2\frac{7}{12}$ – [3 $\frac{1}{2}$ - { 8 – ( $5\frac{1}{3}$ - 3 - 1 $\frac{1}{2}$)}]