**DR. VIRENDRA SWAROOP EDUCATION CENTRE, PANKI, KANPUR**

**REVISION SHEET- 7**

**CLASS – VIII (MATHEMATICS)**

1. Divide: 52pqr(p+q)(q+r)(r+p) $÷$104pq(q+r)(r+p)
2. Divide: 12x3- 17x2+26x – 18 by 3x2 -2x +5
3. If a+b = 5 and a2 + b2 =13, find ab.
4. Factorise : 12x3 – 14x2 – 10x
5. I borrowed Rs. 12,000 from Jamshed at 6% per annum simple interest for 2 years. Had I borrowed this sum at 6% per annum compound interest, what extra amount would I have to pay?
6. At what rate percent per annum compound interest will Rs. 5000 amount to 5832 in 2 years?
7. In what time will Rs. 64,000 amount to Rs. 68,921 at 5%per annum, interest being paid half-yearly?
8. A shopkeeper bought a second-hand sofa for Rs. 3500 and spent Rs. 200 on transportation and Rs. 300 on its repairs. He sold it for Rs. 4400. Find his gain or loss percent.
9. Construct a rhombus whose diagonals are 6 cm and 4 cm.
10. Construct a square ABCD in which each diagonal is of 6 cm length.
11. How many soap cakes measuring 7 cmx5cmx2.5cm can be placed in a box of size 56cmx0.4mx0.25m ?
12. A cistern can be filled by 3 taps A, B and C when turned on separately in 24 min, 10 min and 30 min respectively. If all are turned on together for 2 $\frac{2}{3}$ minutes and taps B and C are then turned off, how much time will A alone take to fill the cistern?
13. The father is 24 years older than his daughter.In 4 years, he wil be thrice as old as his daughter. Find their present ages.
14. If 4 goats or 6 sheep can graze a field in 40 days, how many days will 4 goats and 14 sheep take to graze the same field?
15. The value of a car depreciates at the rate of 10% per year. If its present value is Rs.65,000, what will be its value after 3 years?
16. A pit is dug in the shape of a cuboid with dimensions 10m x8m x3m. The earth taken out is spread evenly on a rectangular plot of land with dimensions 40m x30m. What is the increase in the level of the plot ?
17. If 6 men or 8 women earn Rs. 960 in a day, then find how much will 14 women and 22 women earn in a day ?
18. If the S.P. of 8 articles is equal to C.P. of 10 articles, find the gain %.
19. When two trains were running in the opposite directions at 50km/hr and 40km/hr respectively, the faster train passed a man in the slower train in 15 seconds. Find the length of the faster train.
20. The ages of Ravi and Hema are in the ratio 5:7. Four years later, their ages will be in the ratio 3:4. Find their ages.