SATISH CHANDRA MEMORIAL SCHOOL

VIII

1. Simplify using suitable property and name the property used.

$$\left[\frac{1}{5}\times\frac{2}{15}\right]+\left[\frac{2}{5}\times\frac{1}{5}\right]$$

2. Solve:

i) $\frac{x+1}{4}=\frac{x-2}{3}$

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

3. The product of two rational numbers is $-\frac{14}{27}$. If one of the numbers be $\frac{7}{9}$, find the other.

4. What is the least number that should be subtracted from 1385 to make it a perfect square? Also find the square root of the perfect square.

5. Three numbers are in the ratio 1:2:3 and the sum of their cubes is 4500. Find the numbers.

6. On rolling a dice find the probability

i) Of getting an even number

ii) Of getting a number more than 4

7. The overall width in cm of several wide screen televisions are 97.28cm, $98\frac{4}{9}$cm, $98\frac{1}{25}$cm and 97.94cm. Express these numbers as rational numbers in the form $\frac{p}{q}$ and arrange them in ascending order.

8. From a deck of well shuffled deck of 52 playing cards find the probability of getting

i) A face card

ii) An ace card

iii) Black card numbered less than 6

9. Show that 0.001728 is the cube of a rational number. Find the rational number whose cube is 0.001728.