The Jain International School, Kanpur

Holiday Homework Worksheet

Subject-Mathematics (041)

Class- VIII

1. Arrange the following numbers in ascending order

$$\frac{-4}{7}, \frac{9}{14}, \frac{13}{28}, \frac{-23}{42}$$

2. Express $\frac{12}{15}$ with denominator: (i) 60 (ii) 5
3. Represent the following numbers on the number line:
   (a) $5\frac{5}{7}$ (b) $\frac{2}{5}$ (c) $-2\frac{5}{6}$
4. Add the following
   (a) $\frac{-8}{9} + \frac{11}{6}$ (b) $2 + \frac{-5}{4}$
5. Subtract
   (a) $\frac{3}{4}$ from $\frac{1}{3}$ (b) $\frac{5}{7}$ from $\frac{-3}{11}$
6. Verify the following

$$\left(\frac{5}{7} \times \frac{12}{13}\right) \times \frac{7}{18} = \frac{5}{7} \times \left(\frac{12}{13} \times \frac{7}{18}\right)$$

7. Verify the following

$$\frac{3}{7} \times \left(\frac{5}{6} + \frac{12}{13}\right) = \left(\frac{3}{7} \times \frac{5}{6}\right) + \left(\frac{3}{7} \times \frac{12}{13}\right)$$

8. Find multiplicative inverse of the following
   (a) $\frac{3}{4}$ (b) $\frac{-13}{17}$ (c) $\frac{-11}{-19}$
9. Find the square of the following numbers
   (a) 23 (b) 39 (c) 125
10. Find the square root of the following
    (a) 729 (b) 8100 (c) 11025
11. By what least number should 2156 be multiplied to get a perfect square number?
12. By what least number should 4851 be divided to get a perfect square number?
13. Using the formula $(a+b)^2 = a^2 + 2ab + b^2$, evaluate 105^2.
14. Using the formula $(a-b)^2 = a^2 - 2ab + b^2$, evaluate 95^2.
15. Find five rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$.
16. Find five rational numbers between $\frac{3}{5}$ and $\frac{2}{3}$.
17. At a cricket match $\frac{2}{7}$ of the spectators were in covered place while 15000 were in open. Find the total number of spectators.
18. The product of two rational numbers is $\frac{-28}{81}$. If one of the numbers is $\frac{14}{27}$ then find the other.
19. One litre of petrol costs Rs $63\frac{3}{4}$. What is the cost of 34 litres of petrol?
20. Rajni had a certain amount of money in her purse. She spent Rs $10\frac{1}{3}$ in the school canteen, bought a gift worth Rs $25\frac{3}{4}$ and gave Rs $16\frac{1}{2}$ to her friend. How much she have to begin with?

Project

Prepare a working model of Maths (related to your syllabus)