

Subject: - Mathematics

PRACTICE PAPER

CBSE-8th

Topic: - Rational Numbers

1. Simplify: $- \left[5\frac{1}{2} \times \left(-1\frac{5}{6} \right) \right] \div 2\frac{3}{4}$ **Ans. $-3\frac{2}{3}$**
2. Taking, $a = \frac{4}{7}$, $b = \frac{-5}{2}$ and $c = \frac{4}{3}$, show that $a \div (b \div c) = (a \div b) \div c$, that is, division is not associative for rational numbers.
3. A plant that is $15\frac{7}{8}$ cm high grows x cm to a height of $19\frac{3}{8}$ cm. Write and solve an equation to find the amount of growth. **Ans. $3\frac{1}{2}$ cm.**
4. One of the first computers took $\frac{1}{5000}$ second to perform one operation. How long did it take to perform 11,000 operations? **Ans. $2\frac{1}{5}$ sec.**
5. $7\frac{1}{2}$ m long rope s cut into 10 equal pieces, What us the length of each piece? **Ans. 75 cm**
6. An oxygen tank contained $219\frac{2}{3}$ L of oxygen before $32\frac{1}{3}$ L were used. If the tank can hold $245\frac{3}{8}$ L, how much space in the tank is unused? **Ans. $58\frac{1}{24}$ L**
7. Out of a certain sum of money a boy spends $\frac{3}{5}$, and then $\frac{1}{4}$ of the remainder. He has ₹ 15 left. How much amount had he at first? **Ans. ₹ 50**
8. Shalini has to cut out circles of diameter $1\frac{1}{4}$ cm from an aluminium strip of dimensions $8\frac{3}{4}$ cm by $1\frac{1}{4}$ cm. How many full circles can Shalini cut? Also, calculate the wastage of the aluminium strip. **Ans. 7 circles, wastage = $2\frac{11}{32}$ cm²**
9. A man reads $\frac{3}{8}$ of the book on a day and $\frac{4}{5}$ of the remainder on the second day. If the number of pages still unread are 40, the how many pages did the book contain? **Ans. 320**
10. A man aged 27 marries a woman aged 24, he dies at the age of 81 and she dies at the age of 91. For what fraction of his life is the man married? For what fraction of her life is the woman a widow? **Ans. $\frac{2}{3}$, $\frac{1}{7}$**