



Worksheet Grade 8

Rational Numbers

Q1 Add the following:

a) $\frac{5}{2} + \frac{3}{8}$ b) $\frac{8}{-15} + \frac{4}{-3}$

Q2) Subtract the following:

a) $\frac{3}{8} - \frac{5}{8}$ b) $\frac{5}{63} - \frac{8}{-21}$

Q3) What should be added to $\frac{5}{-11}$ so as to get $\frac{26}{23}$

Q4) Use distributivity of multiplication of rational numbers over their addition to simplify:

a) $\frac{2}{7} \times \left(\frac{7}{16} - \frac{21}{4} \right)$ b) $\frac{-5}{4} \times \left(\frac{8}{5} + \frac{16}{5} \right)$

Q5) Verify and state the property

a) $\frac{7}{4} \times \left(\frac{-8}{3} + \frac{-13}{12} \right) = \left(\frac{7}{4} \times \frac{-8}{3} \right) + \left(\frac{7}{4} \times \frac{-13}{12} \right)$

b) $\left(\frac{-3}{2} \times \frac{5}{4} \right) + \left(\frac{-3}{2} \times \frac{-7}{6} \right) = \frac{-3}{2} \times \left(\frac{5}{4} + \frac{-7}{6} \right)$

Q6) Fill in the blank

a) Reciprocal of $\frac{1}{8}$ is _____

b) $(97 \times 63)^{-1} = 97^{-1} \times$ _____

c) Zero has _____ reciprocal

d) The numbers _____ and _____ are reciprocal of each other.

e) The product of two negative rational number is always _____

Q7) Find eight rational numbers between $\frac{-2}{5}$ and $\frac{1}{2}$

Q8) Represent $\frac{3}{7}$ and $\frac{-8}{7}$ on number line.

Q9) Cost of $2\frac{1}{3}$ meter of cloth is Rs $75\frac{1}{4}$. Find cost of cloth per meter.



Answer Key Grade 8 Rational Number

A1) a) $\frac{23}{8}$ b) $\frac{-28}{15}$

A2) a) $\frac{-1}{4}$ b) $\frac{-29}{63}$

A3) $\frac{401}{253}$

A4) a) $\frac{-11}{8}$ b) -6

A6) a) 8 b) 63^{-1} c) No d) 1, -1 e) positive

A7) $\frac{-3}{10}, \frac{-2}{10}, \frac{-1}{10}, 0, \frac{1}{10}, \frac{2}{10}, \frac{3}{10}, \frac{4}{10}$

A9) Rs 32.25 or $\frac{129}{4}$