

Class VIII – Mathematics

Revision Assignment: Rational Numbers

- 1) Express the rational number $\frac{-5}{7}$ with
- Numerator = 15
 - Numerator = 20
 - Denominator = -35
- 2) Find x such that $\frac{-3}{8}$ and $\frac{x}{-24}$ are equivalent rational numbers
- 3) Simplify:
- $\frac{-7}{10} + \frac{13}{15} + \frac{27}{20}$
 - $\frac{-16}{9} + \frac{5}{12} + \frac{7}{18}$
- [Ans: $\frac{-13}{60}$]
- [Ans: $\frac{-65}{36}$]
- 4) The sum of two rational numbers is 2. if one of the rational number is $\frac{-12}{5}$, find the other
- 5) What number should be added to
- $\frac{-6}{5}$ to get $\frac{2}{3}$
 - 1 to get $\frac{5}{7}$
- 6) using suitable p[property of rational numbers, evaluate:
- $\frac{-3}{5} + \frac{5}{8} + \frac{-4}{14} + \frac{-2}{3} + \frac{3}{4}$
 - $\frac{-12}{5} + \frac{1}{7} + \frac{-1}{10} + \frac{3}{14} + \frac{-7}{20}$
- 7) What should be added to $\left(\frac{-13}{4} + \frac{-3}{8}\right)$ to get 1
- 8) Simplify:
- $\left(\frac{-13}{8} \times \frac{12}{13}\right) + \left(\frac{-4}{9} \times \frac{3}{-2}\right)$
 - $\left(\frac{16}{15} \times \frac{-25}{8}\right) + \left(\frac{-14}{27} \times \frac{6}{7}\right)$
 - $\left(\frac{6}{55} \times \frac{-22}{9}\right) - \left(\frac{26}{125} \times \frac{-10}{39}\right)$
 - $\left(\frac{-12}{7} \times \frac{-14}{27}\right) - \left(\frac{-8}{45} \times \frac{9}{16}\right)$

9) If 24 trousers of equal sizes can be prepared in 54 metres of cloth, what length of cloth is required for a) each trouser b) 6 trousers [Ans: $\frac{9}{4}m, \frac{27}{2}m$]

10) Simplify

a. $(-3) \times \left(\frac{-10}{9}\right) \times \left(\frac{18}{-5}\right) \times \left(\frac{1}{-6}\right)$

b. $(-4) \times \left(\frac{-1}{9}\right) \times \left(\frac{3}{20}\right) \times \left(\frac{-6}{5}\right)$

11) Insert 5 rational numbers between

a) $\frac{3}{4}$ and $\frac{5}{7}$

b) -4 and -7

c) $\frac{-3}{7}$ and $\frac{7}{9}$

12) Simplify:

a. $\frac{-3}{5} \times \left(\frac{-10}{9}\right) \times \left(\frac{21}{-4}\right) \times (-6)$

b. $\frac{3}{11} \times \frac{-5}{6} \times \left(\frac{-22}{9}\right) \times \left(\frac{-9}{5}\right)$