



Rational Numbers Ex 1.5 Q3

Answer :

$$(i) \frac{-16}{21} \times \frac{14}{5} = \frac{-2 \times 2 \times 2 \times 2}{3 \times 7} \times \frac{2 \times 7}{5} = \frac{-32}{15}$$

$$(ii) \frac{7}{6} \times \frac{-3}{28} = \frac{7}{2 \times 3} \times \frac{-3}{2 \times 2 \times 7} = \frac{-1}{8}$$

$$(iii) \frac{-19}{36} \times 16 = \frac{-19}{2 \times 2 \times 3 \times 3} \times 2 \times 2 \times 2 \times 2 = \frac{-76}{9}$$

$$(iv) \frac{-13}{9} \times \frac{27}{-26} = \frac{-13}{3 \times 3} \times \frac{3 \times 3 \times 3}{-2 \times 13} = \frac{3}{2}$$

$$(v) \frac{-9}{16} \times \frac{-64}{-27} = \frac{-9}{16} \times \frac{-4 \times 16}{-3 \times 9} = \frac{-4}{3}$$

$$(vi) \frac{-50}{7} \times \frac{14}{3} = \frac{-50}{7} \times \frac{2 \times 7}{3} = \frac{-100}{3}$$

$$(vii) \frac{-11}{9} \times \frac{-81}{-88} = \frac{-11}{9} \times \frac{-9 \times 9}{-8 \times 11} = \frac{-9}{8}$$

$$(viii) \frac{-5}{9} \times \frac{72}{-25} = \frac{-5}{9} \times \frac{8 \times 9}{-5 \times 5} = \frac{8}{5}$$

Rational Numbers Ex 1.5 Q4

Answer :

$$\left(\text{i} \right) \left(\frac{25}{8} \times \frac{2}{5} \right) - \left(\frac{3}{5} \times \frac{-10}{9} \right)$$

$$= \frac{5}{4} - \frac{-2}{3}$$

$$= \frac{5 \times 3 + 2 \times 4}{12}$$

$$= \frac{23}{12}$$

$$\left(\text{ii} \right) \left(\frac{1}{2} \times \frac{1}{4} \right) + \left(\frac{1}{2} \times 6 \right)$$

$$= \frac{1}{8} + 3$$

$$= \frac{1 + 3 \times 8}{8}$$

$$= \frac{25}{8}$$

$$\left(\text{iii} \right) \left(-5 \times \frac{2}{15} \right) - \left(-6 \times \frac{2}{9} \right)$$

$$= \frac{-2}{3} - \frac{-4}{3}$$

$$= \frac{-2 + 4}{3}$$

$$= \frac{2}{3}$$

$$\left(\text{iv} \right) \left(\frac{-9}{4} \times \frac{5}{3} \right) + \left(\frac{13}{2} \times \frac{5}{6} \right)$$

$$= \frac{-3 \times 5}{4} + \frac{13 \times 5}{12}$$

$$= \frac{-15}{4} + \frac{65}{12}$$

$$= \frac{-15 \times 3 + 65}{12}$$

$$= \frac{20}{12} = \frac{5}{3}$$

$$\left(\mathbf{v} \right) \left(\frac{-4}{3} \times \frac{12}{-5} \right) + \left(\frac{3}{7} \times \frac{21}{15} \right)$$

$$= \frac{4 \times 4}{5} + \frac{1 \times 3}{5}$$

$$= \frac{16}{5} + \frac{3}{5}$$

$$= \frac{16 + 3}{5}$$

$$= \frac{19}{5}$$

$$\left(\mathbf{vi} \right) \left(\frac{13}{5} \times \frac{8}{3} \right) - \left(\frac{-5}{2} \times \frac{11}{3} \right)$$

$$= \frac{13 \times 8}{15} - \frac{-5 \times 11}{6}$$

$$= \frac{104}{15} - \frac{-55}{6}$$

$$= \frac{104 \times 2 + 55 \times 5}{30}$$

$$= \frac{483}{30}$$

$$\left(\text{vii} \right) \left(\frac{13}{7} \times \frac{11}{26} \right) - \left(\frac{-4}{3} \times \frac{5}{6} \right)$$

$$= \frac{1 \times 11}{7 \times 2} - \frac{-2 \times 5}{3 \times 3}$$

$$= \frac{11}{14} - \frac{-10}{9}$$

$$= \frac{11 \times 9 + 10 \times 14}{126}$$

$$= \frac{239}{126}$$

$$\left(\text{viii} \right) \left(\frac{8}{5} \times \frac{-3}{2} \right) + \left(\frac{-3}{10} \times \frac{11}{16} \right)$$

$$= \frac{4 \times (-3)}{5} + \frac{-3 \times 11}{10 \times 16}$$

$$= \frac{-12}{5} + \frac{-33}{160}$$

$$= \frac{-12 \times 32 - 33}{160}$$

$$= \frac{-384 - 33}{160}$$

$$= \frac{-417}{160}$$

***** END *****