

EduSahara™ Learning Center Assignment**Grade : Class IX, ICSE****Chapter : Rational and Irrational Numbers****Name : Rational Number Properties**1. The additive inverse of $(-\frac{3}{8})$ is

- (i)
- $\frac{8}{3}$
- (ii)
- $(-\frac{5}{8})$
- (iii) 0 (iv)
- $\frac{3}{8}$
- (v)
- $-\frac{8}{3}$

2. The multiplicative inverse of $\frac{7}{8}$ is

- (i)
- $\frac{1}{7}$
- (ii)
- $2\frac{1}{7}$
- (iii)
- $(-\frac{6}{7})$
- (iv)
- $3\frac{1}{7}$
- (v)
- $\frac{8}{7}$

3. The additive inverse of $(-\frac{4}{3})$ is

- (i)
- $\frac{3}{4}$
- (ii)
- $\frac{1}{3}$
- (iii)
- $\frac{3}{-4}$
- (iv)
- $\frac{4}{3}$
- (v) 0

4. The multiplicative inverse of $\frac{8}{3}$ is

- (i)
- $1\frac{3}{8}$
- (ii)
- $(-1\frac{5}{8})$
- (iii)
- $(-\frac{5}{8})$
- (iv)
- $2\frac{3}{8}$
- (v)
- $\frac{3}{8}$

5. The additive inverse of $(-\frac{5}{2})$ is

- (i)
- $\frac{2}{-5}$
- (ii) 0 (iii)
- $\frac{2}{5}$
- (iv)
- $1\frac{1}{2}$
- (v)
- $\frac{5}{2}$

6. The multiplicative inverse of $\frac{5}{4}$ is

- (i)
- $1\frac{4}{5}$
- (ii)
- $\frac{4}{5}$
- (iii)
- $(-\frac{1}{5})$
- (iv)
- $2\frac{4}{5}$
- (v)
- $(-1\frac{1}{5})$

7. Which of the following are true?

- a) $\frac{1}{6} \div \frac{27}{4} = \frac{27}{4} \div \frac{1}{6}$
 b) $\frac{3}{16} \times \frac{27}{4} = \frac{27}{4} \times \frac{3}{16}$
 c) $\frac{3}{16} + \frac{52}{17} = \frac{52}{17} + \frac{3}{16}$
 d) $\frac{1}{6} - \frac{52}{17} = \frac{52}{17} - \frac{1}{6}$

- (i) {a,b} (ii) {a,c,b} (iii) {a,d,b} (iv) {b,c} (v) {d,c}

8. Which of the following are true?

- a) $\frac{9}{2} + (\frac{59}{10} + \frac{3}{13}) = (\frac{9}{2} + \frac{59}{10}) + \frac{3}{13}$
 b) $\frac{11}{19} - (\frac{59}{10} - \frac{13}{19}) = (\frac{11}{19} - \frac{59}{10}) - \frac{13}{19}$
 c) $\frac{9}{2} \times (\frac{145}{14} \times \frac{16}{19}) = (\frac{9}{2} \times \frac{145}{14}) \times \frac{16}{19}$
 d) $\frac{11}{19} \div (\frac{145}{14} \div \frac{20}{3}) = (\frac{11}{19} \div \frac{145}{14}) \div \frac{20}{3}$

- (i) {d,c} (ii) {b,d,a} (iii) {b,a} (iv) {b,c,a} (v) {a,c}

9. Which of the following are true?

- a) $\frac{2}{13} \times (\frac{46}{9} - \frac{13}{18}) = (\frac{2}{13} \times \frac{46}{9}) - (\frac{2}{13} \times \frac{13}{18})$
 b) $\frac{1}{20} - (\frac{46}{9} \times \frac{17}{16}) = (\frac{1}{20} - \frac{46}{9}) \times (\frac{1}{20} - \frac{17}{16})$
 c) $\frac{1}{20} \div (\frac{83}{13} + \frac{11}{3}) = (\frac{1}{20} \div \frac{83}{13}) + (\frac{1}{20} \div \frac{11}{3})$
 d) $\frac{2}{13} \times (\frac{83}{13} + \frac{12}{7}) = (\frac{2}{13} \times \frac{83}{13}) + (\frac{2}{13} \times \frac{12}{7})$

(i) {b,d,a} (ii) {c,d} (iii) {b,a} (iv) {a,d} (v) {b,c,a}

10. Which of the following are true?

- a) $\frac{1}{2} \div \frac{38}{5} = \frac{38}{5} \div \frac{1}{2}$
 b) $\frac{9}{19} \times \frac{38}{5} = \frac{38}{5} \times \frac{9}{19}$
 c) $\frac{9}{19} + \frac{129}{16} = \frac{129}{16} + \frac{9}{19}$
 d) $\frac{1}{2} - \frac{129}{16} = \frac{129}{16} - \frac{1}{2}$

(i) {d,c} (ii) {a,b} (iii) {a,d,b} (iv) {a,c,b} (v) {b,c}

11. Which of the following are true?

- a) $\frac{1}{14} - (\frac{73}{12} - \frac{12}{11}) = (\frac{1}{14} - \frac{73}{12}) - \frac{12}{11}$
 b) $\frac{17}{15} + (\frac{73}{12} + \frac{11}{15}) = (\frac{17}{15} + \frac{73}{12}) + \frac{11}{15}$
 c) $\frac{17}{15} \times (\frac{61}{11} \times \frac{2}{13}) = (\frac{17}{15} \times \frac{61}{11}) \times \frac{2}{13}$
 d) $\frac{1}{14} \div (\frac{61}{11} \div \frac{2}{11}) = (\frac{1}{14} \div \frac{61}{11}) \div \frac{2}{11}$

(i) {d,c} (ii) {a,b} (iii) {a,c,b} (iv) {b,c} (v) {a,d,b}

12. Which of the following are true?

- a) $\frac{14}{11} \times (\frac{37}{10} - \frac{17}{3}) = (\frac{14}{11} \times \frac{37}{10}) - (\frac{14}{11} \times \frac{17}{3})$
 b) $\frac{2}{11} - (\frac{37}{10} \times \frac{20}{3}) = (\frac{2}{11} - \frac{37}{10}) \times (\frac{2}{11} - \frac{20}{3})$
 c) $\frac{14}{11} \times (\frac{149}{17} + \frac{14}{19}) = (\frac{14}{11} \times \frac{149}{17}) + (\frac{14}{11} \times \frac{14}{19})$
 d) $\frac{2}{11} \div (\frac{149}{17} + \frac{19}{4}) = (\frac{2}{11} \div \frac{149}{17}) + (\frac{2}{11} \div \frac{19}{4})$

(i) {d,c} (ii) {b,a} (iii) {b,c,a} (iv) {a,c} (v) {b,d,a}

13. Which of the following are true?

- a) $\frac{9}{8} + \frac{127}{15} = \frac{127}{15} + \frac{9}{8}$
 b) $\frac{17}{12} \div \frac{19}{9} = \frac{19}{9} \div \frac{17}{12}$
 c) $\frac{9}{8} \times \frac{19}{9} = \frac{19}{9} \times \frac{9}{8}$
 d) $\frac{17}{12} - \frac{127}{15} = \frac{127}{15} - \frac{17}{12}$

(i) {d,c} (ii) {b,c,a} (iii) {b,a} (iv) {a,c} (v) {b,d,a}

14. Which of the following are true?

- a) $\frac{1}{2} + (\frac{55}{7} + \frac{11}{16}) = (\frac{1}{2} + \frac{55}{7}) + \frac{11}{16}$
 b) $\frac{2}{3} \div (\frac{45}{17} \div \frac{3}{11}) = (\frac{2}{3} \div \frac{45}{17}) \div \frac{3}{11}$

$$c) \overline{2} \times (\overline{17} \times \overline{15}) = (\overline{2} \times \overline{17}) \times \overline{15}$$

$$d) \frac{2}{3} - (\frac{55}{7} - \frac{19}{2}) = (\frac{2}{3} - \frac{55}{7}) - \frac{19}{2}$$

(i) {b,a} (ii) {a,c} (iii) {b,c,a} (iv) {d,c} (v) {b,d,a}

15. Which of the following are true?

$$a) \frac{17}{12} - (\frac{37}{14} \times \frac{7}{19}) = (\frac{17}{12} - \frac{37}{14}) \times (\frac{17}{12} - \frac{7}{19})$$

$$b) \frac{17}{12} \div (\frac{187}{19} + \frac{5}{8}) = (\frac{17}{12} \div \frac{187}{19}) + (\frac{17}{12} \div \frac{5}{8})$$

$$c) \frac{20}{13} \times (\frac{187}{19} + \frac{6}{13}) = (\frac{20}{13} \times \frac{187}{19}) + (\frac{20}{13} \times \frac{6}{13})$$

$$d) \frac{20}{13} \times (\frac{37}{14} - \frac{9}{17}) = (\frac{20}{13} \times \frac{37}{14}) - (\frac{20}{13} \times \frac{9}{17})$$

(i) {a,c} (ii) {c,d} (iii) {a,d,c} (iv) {b,d} (v) {a,b,c}

Assignment Key

- 1) (iv)
- 2) (v)
- 3) (iv)
- 4) (v)
- 5) (v)
- 6) (ii)
- 7) (iv)
- 8) (v)
- 9) (iv)
- 10) (v)
- 11) (iv)
- 12) (iv)
- 13) (iv)
- 14) (ii)
- 15) (ii)