EduSahara™ Learning Center Assignment

Grade : Class X, SSC
Chapter : Real Numbers
Name : Properties of Real Numbers

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1. Which of the following are true?
   a) Division is closed under real numbers
   b) Subtraction is closed under real numbers
   c) Addition is closed under real numbers
   d) Multiplication is closed under real numbers

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

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2. The additive inverse of $\frac{8}{3}$ is

   (i) $\frac{3}{8}$ (ii) 0 (iii) $(-3\frac{2}{3})$ (iv) $\frac{3}{-8}$ (v) $(\frac{-8}{3})$

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3. The multiplicative inverse of $(\frac{-3}{7})$ is

   (i) $(-3\frac{1}{3})$ (ii) $(-1\frac{1}{3})$ (iii) $(\frac{-1}{3})$ (iv) $(\frac{-7}{3})$ (v) $(-4\frac{1}{3})$

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4. Which of the following are true?
   a) $\frac{3}{10} - \frac{44}{3} = \frac{44}{3} - \frac{3}{10}$
   b) $\frac{11}{9} + \frac{44}{3} = \frac{44}{3} + \frac{11}{9}$
   c) $\frac{3}{10} \div \frac{107}{19} = \frac{107}{19} \div \frac{3}{10}$
   d) $\frac{11}{9} \times \frac{107}{19} = \frac{107}{19} \times \frac{11}{9}$

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

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5. Which of the following are true?
   a) $\frac{11}{10} - (\frac{73}{14} - \frac{9}{16}) = (\frac{11}{10} - \frac{73}{14}) - \frac{9}{16}$
   b) $\frac{5}{19} + (\frac{73}{14} + \frac{3}{19}) = (\frac{5}{19} + \frac{73}{14}) + \frac{3}{19}$
   c) $\frac{11}{10} \div (\frac{47}{14} \div \frac{17}{15}) = (\frac{11}{10} \div \frac{47}{14}) \div \frac{17}{15}$
   d) $\frac{5}{19} \times (\frac{47}{14} \times \frac{14}{13}) = (\frac{5}{19} \times \frac{47}{14}) \times \frac{14}{13}$

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

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6. Which of the following are true?
   a) $\frac{9}{17} \times (\frac{171}{20} + \frac{15}{11}) = (\frac{9}{17} \times \frac{171}{20}) + (\frac{9}{17} \times \frac{15}{11})$
   b) $\frac{9}{17} \times (\frac{95}{18} - \frac{19}{10}) = (\frac{9}{17} \times \frac{95}{18}) - (\frac{9}{17} \times \frac{19}{10})$
   c) $\frac{5}{12} - (\frac{95}{18} \times \frac{7}{4}) = (\frac{5}{12} - \frac{95}{18}) \times (\frac{5}{12} - \frac{7}{4})$
   d) $\frac{5}{12} \div (\frac{171}{20} + \frac{7}{6}) = (\frac{5}{12} \div \frac{171}{20}) + (\frac{5}{12} \div \frac{7}{6})$

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

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7. Which of the following is true?

   a) 2.3500 ÷ 4.5100 = 4.5100 ÷ 2.3500

   b) 4.8500 − 2.3500 = 2.3500 − 4.8500

   c) 12.3300 + 4.8500 = 4.8500 + 12.3300

   d) 4.5100 × 12.3300 = 12.3300 × 4.5100

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

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8. Which of the following is true?

   a) 16.0300 + (20.9700 + 18.5400) = (16.0300 + 20.9700) + 18.5400

   b) 9.5800 × (16.0300 × 20.9700) = (9.5800 × 16.0300) × 20.9700

   c) 18.5400 ÷ (9.5800 ÷ 16.0300) = (18.5400 ÷ 9.5800) ÷ 16.0300

   d) 20.9700 − (18.5400 − 9.5800) = (20.9700 − 18.5400) − 9.5800

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

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9. Which of the following is true?

   a) 2.6900 × (18.7400 + 2.3600) = (2.6900 × 18.7400) + (2.6900 × 2.3600)

   b) 18.7400 × (2.3600 − 4.8500) = (18.7400 × 2.3600) − (18.7400 × 4.8500)

   c) 4.8500 ÷ (2.6900 + 18.7400) = (4.8500 ÷ 2.6900) + (4.8500 ÷ 18.7400)

   d) 2.3600 − (4.8500 × 2.6900) = (2.3600 − 4.8500) × (2.3600 − 2.6900)

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

Assignment Key

1) (v)
2) (v)
3) (iv)
4) (iii)
5) (iv)
6) (v)
7) (iii)
8) (iii)
9) (i)