



1. Which of the following are true?

a) $11 \div 13 = 13 \div 11$

b) $7 - 11 = 11 - 7$

c) $13 \times 16 = 16 \times 13$

d) $16 + 7 = 7 + 16$

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

2. Which of the following are true?

a) $13 - (8 - 9) = (13 - 8) - 9$

b) $8 \div (9 \div 7) = (8 \div 9) \div 7$

c) $7 + (13 + 8) = (7 + 13) + 8$

d) $9 \times (7 \times 13) = (9 \times 7) \times 13$

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

3. Which of the following are true?

a) $6 - (10 \times 9) = (6 - 10) \times (6 - 9)$

b) $9 \times (14 + 6) = (9 \times 14) + (9 \times 6)$

c) $14 \times (6 - 10) = (14 \times 6) - (14 \times 10)$

d) $10 \div (9 + 14) = (10 \div 9) + (10 \div 14)$

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

4. Which of the following are true?

a) integers are closed under addition

b) integers are closed under subtraction

c) integers are closed under division

d) integers are closed under multiplication

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

5. Which of the following are true?

a) $17 - 16 = 16 - 17$

b) $2 \times 14 = 14 \times 2$

c) $16 \div 2 = 2 \div 16$

d) $14 + 17 = 17 + 14$

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

6. Which of the following are true?

a) $10 \times (11 \times 3) = (10 \times 11) \times 3$

b) $15 \div (10 \div 11) = (15 \div 10) \div 11$

c) $11 + (3 + 15) = (11 + 3) + 15$

d) $3 - (15 - 10) = (3 - 15) - 10$

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

7. Which of the following are true?

a) $11 \times (13 + 6) = (11 \times 13) + (11 \times 6)$

b) $15 \div (11 + 13) = (15 \div 11) + (15 \div 13)$

c) $13 \times (6 - 15) = (13 \times 6) - (13 \times 15)$

d) $6 - (15 \times 11) = (6 - 15) \times (6 - 11)$

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

Assignment Key

1) (iii)

2) (iv)

3) (v)

4) (i)

5) (i)

6) (i)

7) (v)