



1. Which of the following are true?

- a)  $8-7=7-8$
- b)  $7\div 17=17\div 7$
- c)  $17\times 11=11\times 17$
- d)  $11+8=8+11$

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

2. Which of the following are true?

- a)  $14\div (7\div 18)=(14\div 7)\div 18$
- b)  $7\times (18\times 17)=(7\times 18)\times 17$
- c)  $17-(14-7)=(17-14)-7$
- d)  $18+(17+14)=(18+17)+14$

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

3. Which of the following are true?

- a)  $5\times (2+14)=(5\times 2)+(5\times 14)$
- b)  $18\div (5+2)=(18\div 5)+(18\div 2)$
- c)  $14-(18\times 5)=(14-18)\times (14-5)$
- d)  $2\times (14-18)=(2\times 14)-(2\times 18)$

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

4. Which of the following are true?

- a)  $12+4=4+12$
- b)  $13\times 12=12\times 13$
- c)  $11\div 13=13\div 11$
- d)  $4-11=11-4$

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

5. Which of the following are true?

- a)  $5+(11+14)=(5+11)+14$
- b)  $13\times (5\times 11)=(13\times 5)\times 11$
- c)  $11-(14-13)=(11-14)-13$
- d)  $14\div (13\div 5)=(14\div 13)\div 5$

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

6. Which of the following are true?

a)  $9 \times (14 - 19) = (9 \times 14) - (9 \times 19)$

b)  $19 \div (3 + 9) = (19 \div 3) + (19 \div 9)$

c)  $3 \times (9 + 14) = (3 \times 9) + (3 \times 14)$

d)  $14 - (19 \times 3) = (14 - 19) \times (14 - 3)$

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

7. Which of the following are true?

a) integers are closed under addition

b) integers are closed under multiplication

c) integers are closed under division

d) integers are closed under subtraction

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

## Assignment Key

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1) (iii)

2) (iv)

3) (v)

4) (ii)

5) (i)

6) (iv)

7) (iii)