



1. Which of the following are true?

- a)  $3+10=10+3$
- b)  $18\div 14=14\div 18$
- c)  $14\times 3=3\times 14$
- d)  $10-18=18-10$

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

2. Which of the following are true?

- a)  $10\times(13\times 9)=(10\times 13)\times 9$
- b)  $12\div(10\div 13)=(12\div 10)\div 13$
- c)  $13+(9+12)=(13+9)+12$
- d)  $9-(12-10)=(9-12)-10$

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

3. Which of the following are true?

- a)  $5\times(10+11)=(5\times 10)+(5\times 11)$
- b)  $12\div(5+10)=(12\div 5)+(12\div 10)$
- c)  $11-(12\times 5)=(11-12)\times(11-5)$
- d)  $10\times(11-12)=(10\times 11)-(10\times 12)$

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

4. Which of the following are true?

- a)  $9\times 2=2\times 9$
- b)  $7-15=15-7$
- c)  $15\div 9=9\div 15$
- d)  $2+7=7+2$

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

5. Which of the following are true?

- a)  $19\times(16\times 10)=(19\times 16)\times 10$
- b)  $10-(12-19)=(10-12)-19$
- c)  $16+(10+12)=(16+10)+12$
- d)  $12\div(19\div 16)=(12\div 19)\div 16$

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

6. Which of the following are true?

- a)  $12 - (6 \times 2) = (12 - 6) \times (12 - 2)$
- b)  $6 \div (2 + 5) = (6 \div 2) + (6 \div 5)$
- c)  $5 \times (12 - 6) = (5 \times 12) - (5 \times 6)$
- d)  $2 \times (5 + 12) = (2 \times 5) + (2 \times 12)$

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

7. Which of the following are true?

- a)  $18 + 13 = 13 + 18$
- b)  $17 \div 5 = 5 \div 17$
- c)  $13 - 17 = 17 - 13$
- d)  $5 \times 18 = 18 \times 5$

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

8. Which of the following are true?

- a)  $19 \times (14 \times 8) = (19 \times 14) \times 8$
- b)  $14 + (8 + 11) = (14 + 8) + 11$
- c)  $8 - (11 - 19) = (8 - 11) - 19$
- d)  $11 \div (19 \div 14) = (11 \div 19) \div 14$

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

9. Which of the following are true?

- a)  $5 - (7 \times 3) = (5 - 7) \times (5 - 3)$
- b)  $7 \div (3 + 17) = (7 \div 3) + (7 \div 17)$
- c)  $17 \times (5 - 7) = (17 \times 5) - (17 \times 7)$
- d)  $3 \times (17 + 5) = (3 \times 17) + (3 \times 5)$

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

10. Which of the following are true?

- a)  $12 \times 13 = 13 \times 12$
- b)  $13 + 11 = 11 + 13$
- c)  $16 \div 12 = 12 \div 16$
- d)  $11 - 16 = 16 - 11$

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

11. Which of the following are true?

- a)  $8 + (13 + 15) = (8 + 13) + 15$
- b)  $7 \times (8 \times 13) = (7 \times 8) \times 13$
- c)  $15 \div (7 \div 8) = (15 \div 7) \div 8$
- d)  $13 - (15 - 7) = (13 - 15) - 7$

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

12. Which of the following are true?

- a)  $7 \div (14 + 19) = (7 \div 14) + (7 \div 19)$
- b)  $12 - (7 \times 14) = (12 - 7) \times (12 - 14)$
- c)  $19 \times (12 - 7) = (19 \times 12) - (19 \times 7)$
- d)  $14 \times (19 + 12) = (14 \times 19) + (14 \times 12)$

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

13. Which of the following are true?

- a)  $3 \div 17 = 17 \div 3$
- b)  $17 \times 13 = 13 \times 17$
- c)  $13 + 15 = 15 + 13$
- d)  $15 - 3 = 3 - 15$

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

14. Which of the following are true?

- a)  $11 + (13 + 8) = (11 + 13) + 8$
- b)  $13 - (8 - 17) = (13 - 8) - 17$
- c)  $8 \div (17 \div 11) = (8 \div 17) \div 11$
- d)  $17 \times (11 \times 13) = (17 \times 11) \times 13$

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

15. Which of the following are true?

- a)  $3 - (4 \times 12) = (3 - 4) \times (3 - 12)$
- b)  $4 \div (12 + 5) = (4 \div 12) + (4 \div 5)$
- c)  $12 \times (5 + 3) = (12 \times 5) + (12 \times 3)$
- d)  $5 \times (3 - 4) = (5 \times 3) - (5 \times 4)$

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

## Assignment Key

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