

1. $x + 7 = 12$

Subtract 7 from both sides

Answer: $x = 5$

2. $3x = 21$

Divide both sides by 3

Answer: $x = 7$

3. $2x + 5 = 17$

Subtract 5: $2x = 12$

Divide by 2

Answer: $x = 6$

4. $4x - 3 = 13$

Add 3: $4x = 16$

Divide by 4

Answer: $x = 4$

5. $x/3 + 2 = 7$

Subtract 2: $x/3 = 5$

Multiply by 3

Answer: $x = 15$

6. $3(x + 2) = 18$

Distribute: $3x + 6 = 18$

Subtract 6: $3x = 12$

Divide by 3

Answer: $x = 4$

7. $5x + 4 = 2x + 19$

Subtract $2x$: $3x + 4 = 19$

Subtract 4: $3x = 15$

Answer: $x = 5$

8. $7 - 2x = 3x - 8$

Add $2x$: $7 = 5x - 8$

Add 8: $15 = 5x$

Answer: $x = 3$

9. $4(2x - 1) - 3(x + 2) = 10$ ★ challenge

Distribute both: $8x - 4 - 3x - 6 = 10$

Combine: $5x - 10 = 10$

Add 10, divide by 5

Answer: $x = 4$

10. $(\frac{2}{3})(6x - 9) = 2x + 8$ ★ challenge

Distribute: $4x - 6 = 2x + 8$

Subtract $2x$: $2x - 6 = 8$

Add 6, divide by 2

Answer: $x = 7$