

**Steps for solving equations:**

- 1 Collect x terms on one side of equation.
- 2 Collect numbers on the other side.
- 3 Divide by the number in front of x.  
*Remember to change signs when you move something over the = sign.*

**Exercise 1 - Simple Equations**

1  $x + 8 = 12$

3  $x + 5 = 3$

5  $3 - x = -5$

7  $x + 7 = 2$

9  $x - 10 = 2$

2  $11 - x = 5$

4  $x - 7 = 5$

6  $3 - x = 7$

8  $x - 1 = -9$

10  $4 - x = -6$

**Exercise 2 - Multiples of x**

Divide both sides by the number in front of x.

1  $3x = 18$

3  $2x = 4$

5  $2x = 7$

7  $5x = 23$

9  $7x = -14$

2  $4x = 28$

4  $6x = 30$

6  $3x = 10$

8  $4x = 15$

10  $3x = -11$

**Exercise 3**

Remember to collect the numbers on the other side.

1  $3x + 6 = 18$

3  $2x - 3 = 7$

5  $3 + 4x = 27$

7  $3x - 6 = -17$

9  $8x + 6 = 6$

2  $4x + 5 = 26$

4  $6x - 12 = 20$

6  $7x + 15 = 8$

8  $5x - 1 = 3$

10  $12x + 1 = 40$

**Exercise 4**

More care is needed in this exercise as there are x terms and numbers on both sides.

1  $5x + 7 = 19 + 3x$

3  $7 + 3x = 17 + x$

5  $4x - 18 = x + 5$

7  $3x - 6 = 17 - 2x$

9  $8x - 6 + 2x = 13 + 5x$

2  $8x + 5 = 2x + 29$

4  $6x - 12 = 2x + 20$

6  $7x - 15 = 4x - 8$

8  $5x - 1 = 3x$

10  $7x - 9 = 3x - 45$