

# Solving Equations



## Outcome 1 - Solving One Step Equations type 1 Questions...

**Examples...**

$$x + 7 = 10$$

$$x = 3$$

Take away 7!

$$a - 4 = 6$$

$$a = 10$$

Add 6!

Solve the following one-step equations...

- |                |                 |
|----------------|-----------------|
| 1 $x + 2 = 11$ | 2 $a + 2 = 8$   |
| 3 $p + 3 = 13$ | 4 $c + 1 = 10$  |
| 5 $d + 1 = 9$  | 6 $t - 3 = 13$  |
| 7 $m - 1 = 11$ | 8 $s - 2 = 7$   |
| 9 $w - 4 = 2$  | 10 $n - 5 = 12$ |

## Outcome 2 - Solving One Step Equations type 2 Questions...

**Examples...**

$$3x = 12$$

$$x = 4$$

Divide by 3!

$$6x = 48$$

$$x = 8$$

Divide by 6!

Solve the following one-step equations...

- |             |              |
|-------------|--------------|
| 1 $2x = 12$ | 2 $3a = 18$  |
| 3 $2p = 14$ | 4 $3c = 24$  |
| 5 $4d = 16$ | 6 $3t = 12$  |
| 7 $4m = 4$  | 8 $5s = 45$  |
| 9 $6w = 42$ | 10 $8n = 72$ |

## Outcome 3 - Solving Two Step Equations Questions...

**Examples...**

1. Take away 7!	1. Add 5!
2. Divide by 5!	2. Divide by 8!

$$5x + 7 = 52$$

$$\begin{array}{r} -7 \quad -7 \\ 5x = 45 \\ \div 5 \quad \div 5 \\ x = 9 \end{array}$$

$$8x - 5 = 27$$

$$\begin{array}{r} +5 \quad +5 \\ 8x = 32 \\ \div 8 \quad \div 8 \\ x = 4 \end{array}$$

## Questions...

Solve the following two-step equations...

- |                 |                   |
|-----------------|-------------------|
| 1 $3x + 4 = 19$ | 2 $9a + 2 = 83$   |
| 3 $8p + 3 = 27$ | 4 $4c + 1 = 17$   |
| 5 $6d - 7 = 29$ | 6 $7t - 10 = 4$   |
| 7 $5m - 4 = 56$ | 8 $2s - 5 = 17$   |
| 9 $3w + 8 = -1$ | 10 $6n - 3 = -45$ |

## Outcome 1 Answers

- |    |          |     |          |
|----|----------|-----|----------|
| 1. | $x = 9$  | 2.  | $a = 6$  |
| 3. | $p = 10$ | 4.  | $c = 9$  |
| 5. | $d = 8$  | 6.  | $t = 16$ |
| 7. | $m = 12$ | 8.  | $s = 9$  |
| 9. | $w = 6$  | 10. | $n = 17$ |

## Outcome 2 Answers

- |    |         |     |         |
|----|---------|-----|---------|
| 1. | $x = 6$ | 2.  | $a = 6$ |
| 3. | $p = 7$ | 4.  | $c = 8$ |
| 5. | $d = 4$ | 6.  | $t = 4$ |
| 7. | $m = 1$ | 8.  | $s = 9$ |
| 9. | $w = 7$ | 10. | $n = 9$ |

## Outcome 3 Answers

- |    |          |     |          |
|----|----------|-----|----------|
| 1. | $x = 5$  | 2.  | $a = 9$  |
| 3. | $p = 3$  | 4.  | $c = 4$  |
| 5. | $d = 6$  | 6.  | $t = 2$  |
| 7. | $m = 12$ | 8.  | $s = 11$ |
| 9. | $w = -3$ | 10. | $n = -7$ |