# Solving Equations Revision

**1.** (a) Solve the equation $5x = 35$

**(1)**

(b) Solve the equation $x - 7 = 35$

**(1)**
**(Total 2 marks)**

**2.** Solve the equations.

(a) $3x = 21$

**(1)**

(b) $y - 2 = 9$

**(1)**

(c) $4z - 1 = 9$

**(2)**

(d) $3t + 4 = 20 + t$

**(3)**
**(Total 7 marks)**

**3.** (a) Solve the equations

(i) $2x = 24$

**(1)**

(ii) $y - 9 = 11$

**(1)**

(iii) $\frac{z}{4} = 8$

**(1)**

(iv) $4w + 3 = 13$

**(2)**
**(Total 6 marks)**

**4.** Solve these equations

(a) $4x - 7 = 5$

**(2)**

(b) $2(y + 5) = 28$

**(3)**

(c) $7z + 2 = 9 - 3z$

**(3)**
**(Total 8 marks)**

**5.** Solve the equations

(a) $8z - 5 = 11$

**(2)**

(b) $3(w - 2) = 9$

**(3)**
**(Total 5 marks)**

**6.** Solve the following equations.

(a) $2x + 5 = 3$

**(2)**

(b) $4(y - 3) = 18$

**(3)**

(c) $\frac{z+4}{2} = 11$

**(2)**
**(Total 7 marks)**

**7.** Solve the equation $5x + 4 = 3x + 7$

**(Total 3 marks)**

**8.** In the table below, the letters $w$, $x$, $y$ and $z$ represent different numbers. The total of each row is given at the side of the table.

| | | | | |
|---|---|---|---|---|
| $w$ | $w$ | $w$ | $w$ | 24 |
| $w$ | $w$ | $x$ | $x$ | 28 |
| $w$ | $w$ | $x$ | $y$ | 25 |
| $w$ | $x$ | $y$ | $z$ | 23 |

Find the values of $w$, $x$, $y$ and $z$.

**(Total 4 marks)**

**9.** (a) Solve the equation $\frac{23 - 2x}{5} = 3$

**(3)**

(b) Solve the inequality $3x + 8 < 29$

**(2)**
**(Total 5 marks)**