COSMOS
COACHING CENTRE

# Earning and Managing money

*Linear equations*

**1** Solve the following linear equations.

**a** $a+7=15$ **b** $y+12=23$ **c** $x+4=14$

**d** $6+g=13$ **e** $7+w=3$ **f** $11+z=-2$

**g** $b-5=4$ **h** $m-9=9$ **i** $c-6=15$

**j** $12-q=5$ **k** $8-h=2$ **l** $-3=n-(-2)$

**2** Solve the following linear equations.

**a** $5n=15$ **b** $6x=30$ **c** $3c=-12$

**d** $2b=15$ **e** $4m=-21$ **f** $-25=6b$

**g** $\frac{s}{2}=8$ **h** $\frac{y}{5}=6$ **i** $\frac{a}{11}=-7$

**j** $12=\frac{g}{2}$ **k** $\frac{c}{-15}=-3$ **l** $3=\frac{k}{-3}$

**3** Eliza was required to solve the following equation on the blackboard. This was her solution.

$$\begin{aligned} 6y+5 &= 7 \\ 6y &= 12 \\ y &= 2 \end{aligned}$$

**a** Where is the error in Eliza's working?

**b** What is the correct solution to the equation?

**c** Check your solution by substituting your answer into the equation.

**4** Solve the following linear equations. All solutions are integers.

**a** $5w+4=29$ **b** $2t+6=12$ **c** $7x-6=22$

**d** $5y-10=-15$ **e** $9m-2=-11$ **f** $12=3a-9$

**g** $5+2e=13$ **h** $4+3b=7$ **i** $32=17-3k$

**j** $16=10+2w$ **k** $70-10d=80$ **l** $98=38-10z$