Chapter 6
Equations and formulae

One-step equations (addition and subtraction)

Question 1 Solve the following equations.

a $x + 3 = 11$

b $a + 9 = 25$

c $y - 5 = 16$

d $b + 7 = 17$

e $m + 3 = 23$

f $n - 9 = 21$

g $k + 1 = 36$

h $y + 3 = 22$

i $t - 5 = 17$

Question 2 Solve the following one-step equations.

a $p - 3 = 15$

b $x - 5 = 18$

c $m - 6 = 31$

d $n - 1 = 5$

e $t - 4 = -7$

f $a - 3 = -8$

g $y + 7 = 9$

h $x - 3 = 28$

i $7 + a = 24$

j $x + 5 = 19$

k $a \div 3 = 58$

l $m - 1 = -10$

Question 3 Solve these equations.

a $a + 7 = 12$

b $n + 6 = 8$

c $x + 3 = 38$

d $b + 5 = 15$

e $p - 8 = 7$

f $a + 5 = 27$

g $m - 9 = 18$

h $t - 2 = 23$

i $y - 6 = 28$

j $x - 7 = 31$

k $a - 7 = 25$

l $12 + x = 41$

Equations and formulae

One-step equations (multiplication and division)

Question 1 Solve the following one-step equations.

a $5a = 35$

b $\dfrac{x}{7} = 3$

c $8y = 56$

d $\dfrac{a}{3} = 8$

e $\dfrac{y}{5} = 9$

f $9x = -45$

g $6m = 54$

h $\dfrac{t}{6} = -7$

i $8t = 72$

Question 2 Solve the following equations.

a $\dfrac{x}{5} = 8$

b $7x = -49$

c $8x = 88$

d $4x = 48$

e $\dfrac{a}{9} = -3$

f $\dfrac{d}{5} = -5$

g $9x = -36$

h $\dfrac{a}{7} = 9$

i $11x = 121$

Question 3 Solve these equations.

a $3a = 21$

b $-7x = -49$

c $\dfrac{p}{-9} = 8$

d $\dfrac{y}{3} = -6$

e $\dfrac{m}{6} = -4$

f $7x = -42$

g $5b = -125$

h $-2x = -18$

i $\dfrac{t}{-2} = 12$

j $\dfrac{y}{7} = 12$

k $\dfrac{n}{8} = 4$

l $-6x = 54$