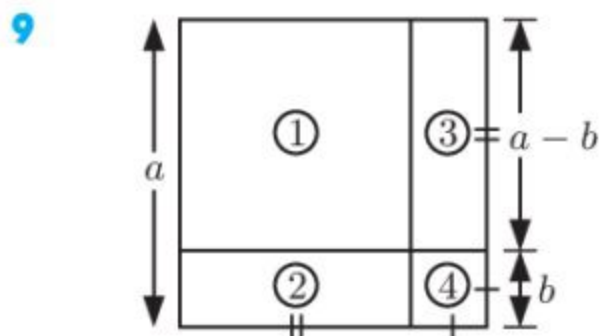


EXERCISE 3A

- 1** **a** $6x + 15$ **b** $4x^2 - 12x$ **c** $-6 - 2x$
d $-3x^2 - 3xy$ **e** $2x^3 - 2x$ **f** $x^3 - x$
g $a^2b - ab^2$ **h** $x^3 - 3x^2$ **i** $3a^2 + 9a + 3$
j $5x^2 - 15x + 10$ **k** $-8c^2 + 12c + 28$
l $6a^3 - 10a^2 + 2a$
- 2** **a** $7x - 14$ **b** $-5x - 6$ **c** $4x - x^2$ **d** $2x^3$
e $a^2 + b^2$ **f** $-x^3 + 9x^2 - 12x$
- 3** **a** $x^2 + 7x + 10$ **b** $x^2 + x - 12$ **c** $x^2 + 2x - 15$
d $x^2 - 12x + 20$ **e** $2x^2 - 5x - 3$ **f** $6x^2 - 23x + 20$
g $2x^2 - xy - y^2$ **h** $-2x^2 - 7x - 3$
i $-x^2 - x - 2xy - 2y$
- 4** **a** $x^2 + 5x - 18$ **b** $2x^2 + 7x - 31$ **c** $x^2 - 8x - 12$
d $-7t + 2$ **e** $2x^2 + 3$ **f** $10x^2 + 53x - 96$
- 5** **a** $x^2 - 49$ **b** $9 - a^2$ **c** $25 - x^2$ **d** $4x^2 - 1$
e $16 - 9y^2$ **f** $9x^2 - 16z^2$
- 6** **a** 27 **b** $22p^2 + p - 4$ **c** $5y^2 + 8z^2$ **d** $8x^4$
- 7** **a** $x^2 + 10x + 25$ **b** $4x^2 + 12x + 9$
c $x^2 + 14x + 49$ **d** $9x^2 + 24x + 16$
e $x^4 + 10x^2 + 25$ **f** $9x^4 + 12x^2 + 4$
g $25x^2 + 30xy + 9y^2$ **h** $4x^4 + 28x^2y + 49y^2$
i $x^6 + 16x^4 + 64x^2$
- 8** **a** $x^2 - 6x + 9$ **b** $x^2 - 4x + 4$
c $9x^2 - 6x + 1$ **d** $25p^2 - 60p + 36$
e $4x^2 - 20xy + 25y^2$ **f** $a^2b^2 - 4ab + 4$
g $x^4 - 10x^2 + 25$ **h** $16x^4 - 24x^2y + 9y^2$
i $x^4 + 2x^2y^2 + y^4$



Hint:

$$\begin{aligned} & \text{Area } \textcircled{1} \\ &= \text{total area} - 2 \times \text{area } \textcircled{2} \\ & \quad - \text{area } \textcircled{4} \end{aligned}$$

- 10** **a** $2x^2 + 14x + 85$ **b** $5x^2 + 18x - 8$ **c** $19x + 74$
d $p^4 - 7p^2 - 10p + 41$ **e** $9x^4 - 10x^2 + 8x - 3$
f $y^4 - x^5 + 2x^3y + 9xy^2 + 25x^2$