Solutions

Marking: **M1** a correct method, **A1** the correct answer, **B1** an independent mark.

Each answer shows the steps, then the **result**.

2.1

- gradient **5**, y-intercept $\mathbf{-3}$

2.2

- $\mathbf{y = -2x + 6}$

2.3

- $\mathbf{x = 4}$

2.4

- gradient $\mathbf{-3}$, y-intercept **4**

2.5

- $y = 2x - 3$
- gradient **2**

3.1

- y-intercept 4
- gradient $\dfrac{-4}{2} = -2$
- $\mathbf{y = -2x + 4}$

3.2

- $y = 2x + c$
- $5 = 2(3) + c$, so $c = -1$
- $\mathbf{y = 2x - 1}$

3.3

(a)

- $\dfrac{7 - (-5)}{3 - (-1)} = \dfrac{12}{4}$
- $= \mathbf{3}$

(b)

- $7 = 3(3) + c$, so $c = -2$
- $\mathbf{y = 3x - 2}$

(c)

- $3(10) - 2 = 28$: **yes**

(d)

- $3x - 2 = 0$, so $\mathbf{x = \dfrac{2}{3}}$