

## Solutions

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Marking: **M1** a correct method, **A1** the correct answer.

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

### 2.1

- parallel lines share a gradient

$$= 5$$

### 2.2

- the gradient is still 3, so  $y = 3x + c$
- substitute  $(2, 9)$ :  $9 = 6 + c$ , so  $c = 3$

$$y = 3x + 3$$

### 2.3

- divide the second equation by 4:  $y = 2x - \frac{3}{4}$
- both gradients are 2, and the intercepts differ, so the lines are parallel

### 3.1

(a)

- divide by 3:  $y = 4x - 3$

$$m = 4$$

(b)

- the parallel line is  $y = 4x + c$
- substitute  $(-1, 2)$ :  $2 = -4 + c$ , so  $c = 6$

$$y = 4x + 6$$

### 3.2

- the gradient stays  $-\frac{1}{2}$ , so  $y = -\frac{1}{2}x + c$
- substitute  $(6, 5)$ :  $5 = -3 + c$ , so  $c = 8$

$$y = -\frac{1}{2}x + 8$$