

Turn over ►

3(a)	y-3 = 4(x-2) y-3 = 4x - 8 y = 4x - 8 + 3	[1] rearrange to be in the form $y = mx + c$
	y = 4x - 5 $m = 4$	[1] gradient
3(b)	3y - 2 = 5x + 23y = 5x + 2 + 2	[1] rearrange to be in the form $y = mx + c$
	$3y = 5x + 4$ $y = \frac{5}{3}x + \frac{4}{3}$ $m = \frac{5}{3}$	[1] gradient
3(c)	(2(3-5x))/y = 33y = 2(3-5x)3y = 6 - 10x	[1] rearrange to be in the form $y = mx + c$
	$y = 2 - \frac{10}{3}x$ ; $m = -\frac{10}{3}$	[1] gradient
4	A and D $(y = 2x + 3 \text{ and } -2x + y = 5)$	[1] parallel lines have the same gradient
	B and C $(y = 4 - 2x \text{ and } -2x - y = 4)$	[1] parallel lines have the same gradient
5	D and E $(2y = 3(2x - 4) \text{ and } \frac{y}{x} = 3)$	[1] parallel lines have the same gradient
	A and C $(y = 7x + 4 \text{ and } 2(3x + 4) - y - (1 - x) = 0)$	[1] parallel lines have the same gradient
	B and G $(6y - 3x + 2 = 0 \text{ and } (x + 1)^2 - x^2 = 4y)$	[1] parallel lines have the same gradient
	F and H $(x = y \text{ and } y - 2(x + 3) = -(6 + x))$	[1] parallel lines have the same gradient
6(a)	$\frac{\text{Change in } y}{\text{Change in } x} = \frac{25}{2} = 12.5$	[1] gradient
	y = 12.5 x - 3912.5	[1] final equation
6(b)	m represents the speed of the car	[1] Correct statement
	m is the change in distance over the change in time	[1] Correct explanation

7(a)	EF and GH have the same gradient.	[1] Parallel lines have the same gradient
	$m = \frac{change \text{ in } y}{change \text{ in } x} = \frac{8-a}{2a-5} = 5$	[1] Gradient
	8 - a = 5(2a - 5) 8 - a = 10a - 25 11a = 33 a = 3	[1] Finding the value of a
7(b)	y = 5x + c 3 = 5(5) + c 3 = 25 + c c = -22	[1] Finding c
	y = 5x - 22	[1] Final equation

END