

Gradients of Straight Lines Mark Scheme

1(a)	$\frac{\text{Change in } y}{\text{Change in } x} = \frac{3}{2}$	[1]
1(b)	$\frac{\text{Change in } y}{\text{Change in } x} = -\frac{2}{3}$	[1]
1(c)	$\frac{\text{Change in } y}{\text{Change in } x} = 1$	[1]
1(d)	$\frac{\text{Change in } y}{\text{Change in } x} = -4$	[1]
2(a)	E	[1] Greatest positive gradient
2(b)	G	[1] Smallest positive gradient
2(c)	H	[1] Greatest negative gradient
2(d)	F	[1] Smallest negative gradient
3(a)	$\frac{\text{Change in } y}{\text{Change in } x} = \frac{4}{3}$	[1] Gradient of A
3(b)	$\frac{\text{Change in } y}{\text{Change in } x} = 0$	[1] Gradient of B (no change in y with regards to x so the gradient is zero)
4(a)	$\frac{\text{Change in } y}{\text{Change in } x} = \frac{4}{3}$	[1] Gradient of X
	$\frac{\text{Change in } y}{\text{Change in } x} = \frac{7}{2}$	[1] Gradient of Y
5(a)	$\frac{\text{change in } y}{\text{change in } x} = \frac{7-5}{8-1}$	[1] Gradient between two points
	$= \frac{2}{7}$	[1] Answer
5(b)	$\frac{\text{change in } y}{\text{change in } x} = \frac{-2-6}{7-3} = \frac{-8}{4}$	[1] Gradient between two points
	$= -2$	[1] Answer
6	$A(x, y) \rightarrow B(3x, 4y)$	[1] Relation between two points
	gradient = $\frac{\text{change in } y}{\text{change in } x} = \frac{4y-y}{3x-x} = \frac{3y}{2x}$	[1] Answer

END