Question	Scheme	Marks	AOs
1(a)	$(6,-5)$ and $(2,1)$		
	Attempts to find the gradient of l_1: $m=\frac{1--5}{2-6}=-\frac{3}{2}$	M1	1.1b
	$y-1=-\frac{3}{2}(x-2)$ or $y--5=-\frac{3}{2}(x-6)$	dM1	1.1b
	$y=-\frac{3}{2}x+4$	A1	1.1b
		(3)	
(b)	l_2: $y=\frac{2}{3}x$	B1ft	2.2a
	Attempts to solve $y=-\frac{3}{2}x+4$ and $y=\frac{2}{3}x$ simultaneously $\frac{2}{3}x=-\frac{3}{2}x+4$ leading to $x=...$	M1	1.1a
	$x=\frac{24}{13}$	A1	1.1b
	$\left(\frac{24}{13},\frac{16}{13}\right)$	A1	1.1b
		(4)	
			(7 marks)

Notes:

(a) M1: Attempts to find the gradient of l_1 using $\frac{\Delta y}{\Delta x}$. Condone one sign error e.g., $\frac{6}{4}$

dM1: $y-y_1=m(x-x_1)$ with either $(6,-5)$ or $(2,1)$ and their $m="-\frac{3}{2}"$

If $y=mx+c$ is used they must proceed as far as $c=\dots$

A1: $y=-\frac{3}{2}x+4$ or $y=4-\frac{3}{2}x$ only.

(b) B1ft: Deduces the equation of l_2 is $y=\frac{-1}{"-\frac{3}{2}"}x$

M1: Attempts to solve their $y=-\frac{3}{2}x+4$ and their $y=\frac{2}{3}x$ simultaneously

$"\frac{2}{3}x"="-\frac{3}{2}x+4"$ leading to $x=...$ May be implied by their values

A1: $x=\frac{24}{13}$ or $y=\frac{16}{13}$ Condone non-recurring decimals given, e.g. $x=$ awrt 1.85 or $y=$ awrt 1.23 here.

A1: $\left(\frac{24}{13},\frac{16}{13}\right)$. Accept $x=\frac{24}{13}, y=\frac{16}{13}$.