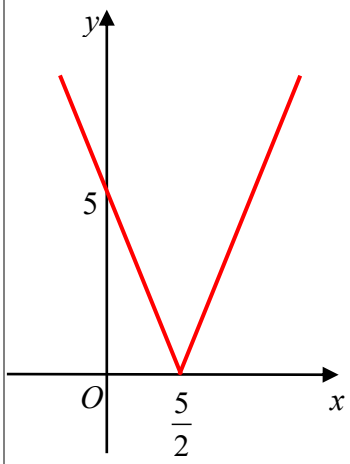
Question	Scheme	Marks	AOs
4(a)	 Correct graph in quadrant 1 and quadrant 2 with V on the x-axis	B1	1.1b
	States $(0, 5)$ and $\left(\frac{5}{2}, 0\right)$ **or** $\frac{5}{2}$ marked in the correct position on the x-axis **and** 5 marked in the correct position on the y-axis	B1	1.1b
		(2)	
(b)	$\lvert 2x-5\rvert > 7$		
	$2x-5=7 \Rightarrow x=\ldots$ **and** $-(2x-5)=7 \Rightarrow x=\ldots$	M1	1.1b
	{critical values are $x=6, -1 \Rightarrow$} $x<-1$ or $x>6$	A1	1.1b
		(2)	
(c)	$\lvert 2x-5\rvert > x-\frac{5}{2}$		
	E.g. • Solves $2x-5=x-\frac{5}{2}$ to give $x=\frac{5}{2}$ and solves $-(2x-5)=x-\frac{5}{2}$ to also give $x=\frac{5}{2}$ • Sketches graphs of $y=\lvert 2x-5\rvert$ and $y=x-\frac{5}{2}$. Indicates that these graphs meet at the point $\left(\frac{5}{2}, 0\right)$	M1	3.1a
	Hence using set notation, e.g. • $\left\{x: x<\frac{5}{2}\right\} \cup \left\{x: x>\frac{5}{2}\right\}$ • $\left\{x \in \mathbb{R}, x \neq \frac{5}{2}\right\}$ • $\mathbb{R} - \left\{\frac{5}{2}\right\}$	A1	2.5
		(2)	
			(6 marks)

Question 4 Notes:	
(a)	
B1:	See scheme
B1:	See scheme
(b)	
M1:	See scheme
A1:	Correct answer, e.g. • $x < -1$ or $x > 6$ • $x < -1 \cup x > 6$ • $\{x : x < -1\} \cup \{x : x > 6\}$
(c)	
M1:	A complete process of finding that $y = \lvert 2x - 5 \rvert$ and $y = x - \frac{5}{2}$ meet at ***only*** one point. This can be achieved either algebraically or graphically.
A1:	See scheme. **Note:** Final answer must be expressed using set notation.