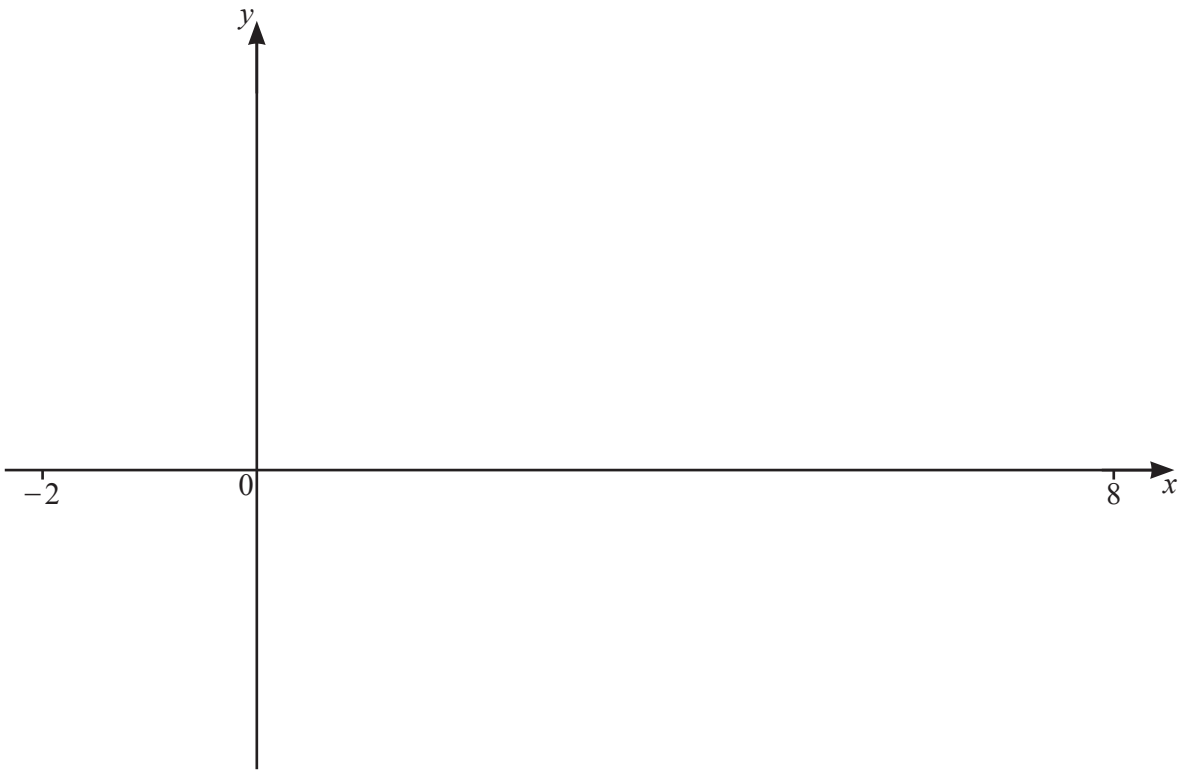
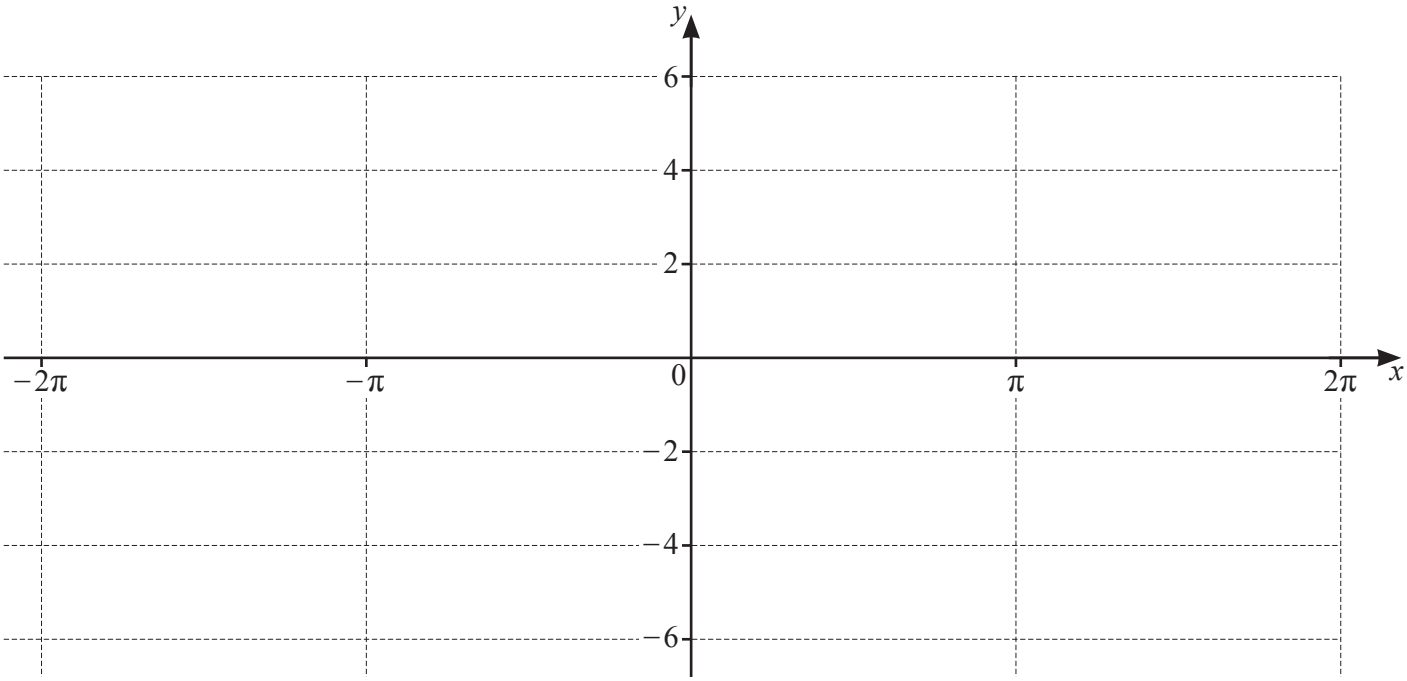
1 **(a)** On the axes, sketch the graphs of $y = |2x + 1|$ and $y = |5 - 3x|$ for $-2 \leqslant x \leqslant 8$. State the coordinates of the points where these graphs meet the coordinate axes. [3]



(b) Solve the equation $|2x + 1| = |5 - 3x|$. [3]

2 **(a)** On the axes, sketch the graph of $y = 5\sin\frac{x}{2} + 1$ for $-2\pi \leqslant x \leqslant 2\pi$. [3]



(b) Write down the amplitude of $5\sin\frac{x}{2} + 1$. [1]

(c) Write down the period of $5\sin\frac{x}{2} + 1$. [1]

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