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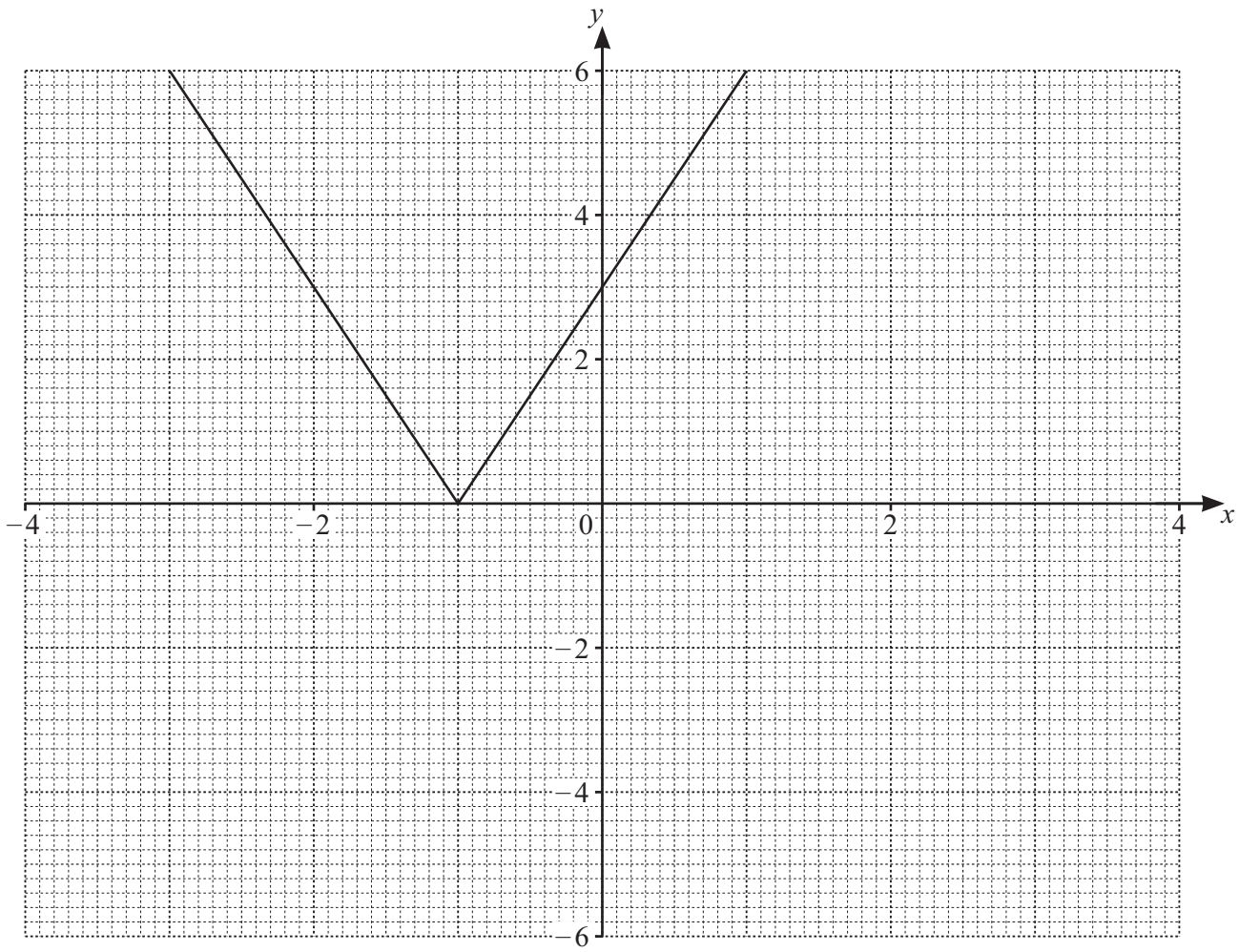
1 The polynomial p is such that $\mathrm{p}(x) = x^3 + ax^2 + bx - 2$, where a and b are constants.

It is given that:

- $x + 2$ is a factor of $\mathrm{p}(x)$
- when $\mathrm{p}(x)$ is divided by $x - 3$ the remainder is 40.

Find the values of a and b. [5]

2



The diagram shows the graph of $y = |3x + 3|$.

Use a graphical method to solve the inequality $|3x + 3| \geqslant |x - 2|$. [3]

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