2 **(a)** Write $3+4x-2x^2$ in the form $a+b(x+c)^2$, where a, b and c are integers. [3]

(b) Hence write down the range of the function $\mathrm{f}(x) = 3+4x-2x^2$, where $x \in \mathbb{R}$. [1]

3 Use algebra to show that the equation $5x(x-3) = 5x-26$ has no real solutions. [3]

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