YOU & MATHS **Dividing polynomials** Use $q(x) = 2x + 3$ and $p(x) = 2x^2 + 3x - 5$. Find $s(x)$ and $r(x)$ such that $p(x) = s(x) \cdot q(x) + r(x)$.

In order to answer the question you need to divide $p(x) = 2x^2 + 3x - 5$ by $q(x) = 2x + 3$ as follows:

$2x^2 + 3x - 5$	$2x + 3$
$-2x^2 - 3x$	x
$- 5$	

Therefore we can conclude that

$s(x) = x$ and $r(x) = -5$.