



## Function End Behaviour (Polynomials) - Behaviour to Function



<b>1</b> Which function (based on its powers and coefficients) would have this end behaviour? $\text{as } x \rightarrow -\infty, y \rightarrow -\infty$ $\text{as } x \rightarrow \infty, y \rightarrow -\infty$	<b>2</b> Which function (based on its powers and coefficients) would have this end behaviour? $\text{as } x \rightarrow -\infty, y \rightarrow \infty$ $\text{as } x \rightarrow \infty, y \rightarrow \infty$
A $f(x) = 5x^2 + 3x + 3$	A $f(x) = 4x^3 - 5x^2 - 5x$
B $f(x) = -5x^2 + 3x + 3$	B $f(x) = 4x^2 - 5x - 5$
<b>3</b> Which function (based on its powers and coefficients) would have this end behaviour? $\text{as } x \rightarrow -\infty, y \rightarrow \infty$ $\text{as } x \rightarrow \infty, y \rightarrow -\infty$	<b>4</b> Which function (based on its powers and coefficients) would have this end behaviour? $\text{as } x \rightarrow -\infty, y \rightarrow -\infty$ $\text{as } x \rightarrow \infty, y \rightarrow \infty$
A $f(x) = -5x^5 + 3x^4 + 3x^3$	A $f(x) = 3x^4 + 5x^3 + 5x^2$
B $f(x) = 5x^5 + 3x^4 + 3x^3$	B $f(x) = 3x^5 + 5x^4 + 5x^3$