



## Function End Behaviour (Polynomials) - Behaviour to Power and Coefficient

**1****as  $x \rightarrow -\infty, y \rightarrow -\infty$** **as  $x \rightarrow \infty, y \rightarrow -\infty$** 

A function with which  
highest power and  
leading coefficient would  
have this end  
behaviour?

A highest power = 7  
leading coefficient = -5

B highest power = 6  
leading coefficient = -5

**2****as  $x \rightarrow -\infty, y \rightarrow -\infty$** **as  $x \rightarrow \infty, y \rightarrow \infty$** 

A function with which  
highest power and  
leading coefficient would  
have this end  
behaviour?

A highest power = 6  
leading coefficient = 3

B highest power = 5  
leading coefficient = 3

**3****as  $x \rightarrow -\infty, y \rightarrow \infty$** **as  $x \rightarrow \infty, y \rightarrow \infty$** 

A function with which  
highest power and  
leading coefficient would  
have this end  
behaviour?

A highest power = 4  
leading coefficient = 5

B highest power = 4  
leading coefficient = -5

**4****as  $x \rightarrow -\infty, y \rightarrow \infty$** **as  $x \rightarrow \infty, y \rightarrow -\infty$** 

A function with which  
highest power and  
leading coefficient would  
have this end  
behaviour?

A highest power = 1  
leading coefficient = -3

B highest power = 2  
leading coefficient = -3