



Function Root Behaviour (Polynomials) - Function and Intercept to Intercept

Behaviour

1	What is the behaviour at this intercept? $f(x) = x^2(x - 3)^3$ at $x = 3$	2	What is the behaviour at this intercept? $f(x) = (x + 2)^2(x - 2)$ at $x = 2$
A	touches the x-axis without crossing and flattens	A	touches the x-axis without crossing
B	crosses the x-axis and flattens	B	crosses the x-axis
3	What is the behaviour at this intercept? $f(x) = (x + 1)x^2$ at $x = -1$	4	What is the behaviour at this intercept? $f(x) = (x + 2)^4x^2$ at $x = 0$
A	crosses the x-axis	A	touches the x-axis without crossing
B	touches the x-axis without crossing	B	crosses the x-axis and flattens
5	What is the behaviour at this intercept? $f(x) = (x + 2)^2x^2$ at $x = -2$	6	What is the behaviour at this intercept? $f(x) = (x + 2)^3x$ at $x = -2$
A	crosses the x-axis and flattens	A	crosses the x-axis and flattens
B	touches the x-axis without crossing	B	touches the x-axis without crossing and flattens
7	What is the behaviour at this intercept? $f(x) = (x + 3)(x + 2)$ at $x = -2$	8	What is the behaviour at this intercept? $f(x) = (x + 3)(x - 2)^4$ at $x = -3$
A	touches the x-axis without crossing	A	touches the x-axis without crossing
B	crosses the x-axis	B	crosses the x-axis