4.2) Quartic graphs

Worked example	Your turn
Sketch the graph of: y = (x + 3)(x + 4)(x - 3)(x - 4)	Sketch the graph of: y = (x + 1)(x + 2)(x - 1)(x - 2)
	(0,4)
	(-2,0) (1,0)
	-10 (-1, 0) 0 (2, 0) 10

Worked example	Your turn
Sketch the graph of: $y = x(x - 3)^2(2 - x)$	Sketch the graph of: $y = x(x + 2)^2(3 - x)$
	40
	20
	(0,0)

Worked example	Your turn
Sketch the graph of: $y = (x + 2)^2(x - 4)^2$	Sketch the graph of: $y = (x - 1)^2(x - 3)^2$

Worked example	Your turn
Sketch the graph of: y = x(x - 4)(x + 5)(x + 6)	Sketch the graph of: y = x(x + 1)(x - 2)(x - 3)
	y -1 2 3 x

Worked example	Your turn
Worked example Sketch the graph of: $y = (x + 4)^2(x - 5)(6 - x)$	Sketch the graph of: $y = (x - 2)^{2}(x + 1)(3 - x)$ y 12 12 x

Worked example	Your turn
Sketch the graph of: $y = (x - 2)(x + 2)^3$	Sketch the graph of: $y = (x + 1)(x - 1)^3$
	у ↑
	-1 1 x
	-1

Worked example	Your turn
Worked example Sketch the graph of: $y = (x + 3)^4$	Sketch the graph of: $y = (x - 2)^4$

Worked example	Your turn
Worked example Sketch the graph of: $y = x^2(x+2)(x-2)$	Sketch the graph of: $y = x^2(x+1)(x-1)$ y -1 1 Y 1 Y

Worked example	Your turn
Sketch the graph of: $y = -(x - 4)(x + 2)^3$	Sketch the graph of: $y = -(x + 1)(x - 3)^3$
	y 27 -1 3 x