**Cubic Graphs**

Use DESMOS to plot the following graphs and then sketch them on to the axes provided

y = x3 y = -x3

Plot the following and then sketch them marking the points where they cross the x and y axes.

y = (x + 3)3 y = (x - 1)3 y = (x + 2)3 y = (x - 4)3

Plot the following and sketch them marking the points where they cross the x and y axes.

y = (x – 3)(x + 2)(x + 5) y = (x – 1)(x – 4)(x + 3) y = x (x + 2)(x + 5)

What do you notice?

Plot the following and sketch them marking where they cross the x and y axes.

y = (x – 2 )(x – 5)(x – 5) y = (x + 3)(x + 2)(x + 3) y = (x + 2)2(x – 4)

What do you notice?

Plot the following and sketch them marking where they cross the x and y axes.

y = (2 – x)(x + 1)(x + 5) y = (2 – x)(x + 3)(4 – x) y = (1 – x)(5 – x)(3 – x)

y = x(4 – x)(1 – x) y = (x + 5)(x + 1)(2 – x) y = x2(3 – x)

What do you notice?

Summary