Straight Line Graphs on Desmos

Go to desmos.com and click on Launch Calculator.

Extension

Can you find lines that pass through the following pairs of points? Write them under each pair of coordinates

1. (1,5) and (4,11)	2. (-2,5) and (2,9)	3. (2,10) and (4,-2)
4. (6,1) and (10, 2)	5. (0.5, 9.5) and (15, -5)	6. (3,4) and (4,3)

Clear all your graphs.

Plot the points (0,0), (1,1), (2,4), (3,9), (4,16), (-1,1), (-2,4), (-3,9), (-4,16). Why is it impossible to draw a straight line through all these points?

Look at the connection between the y coordinate and the x coordinate. Can you find an equation that goes through all these points? If so, what is it?