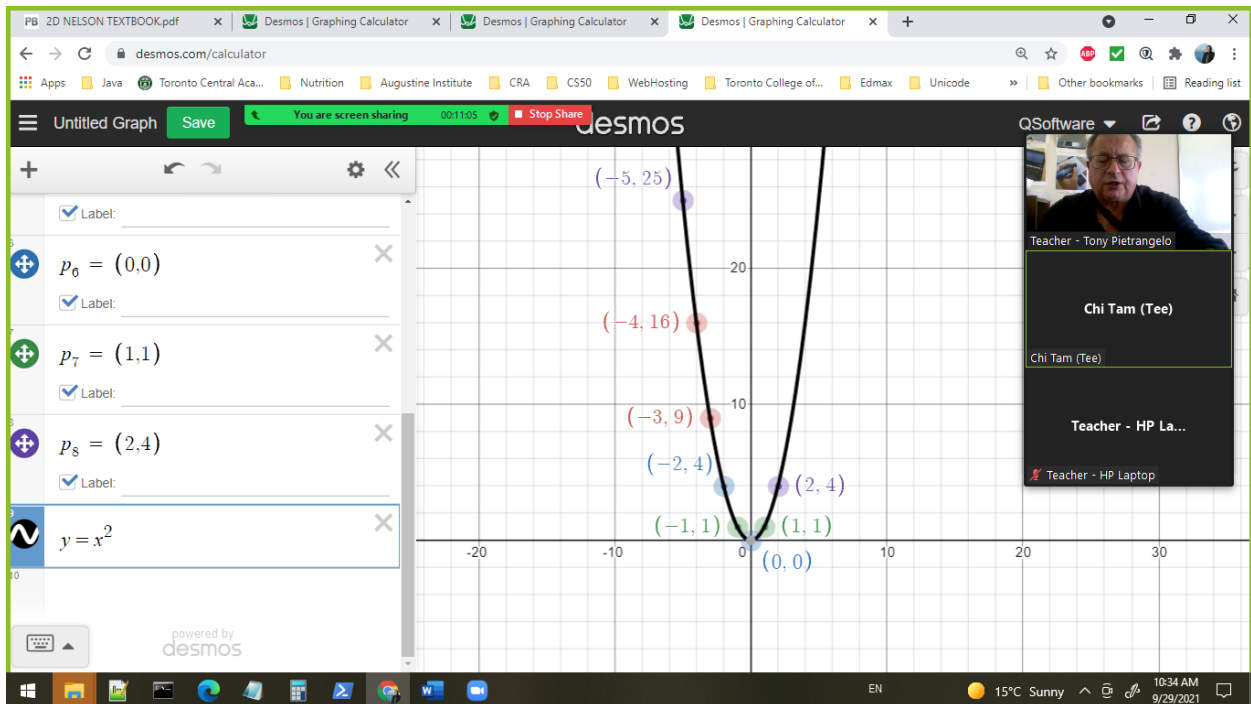
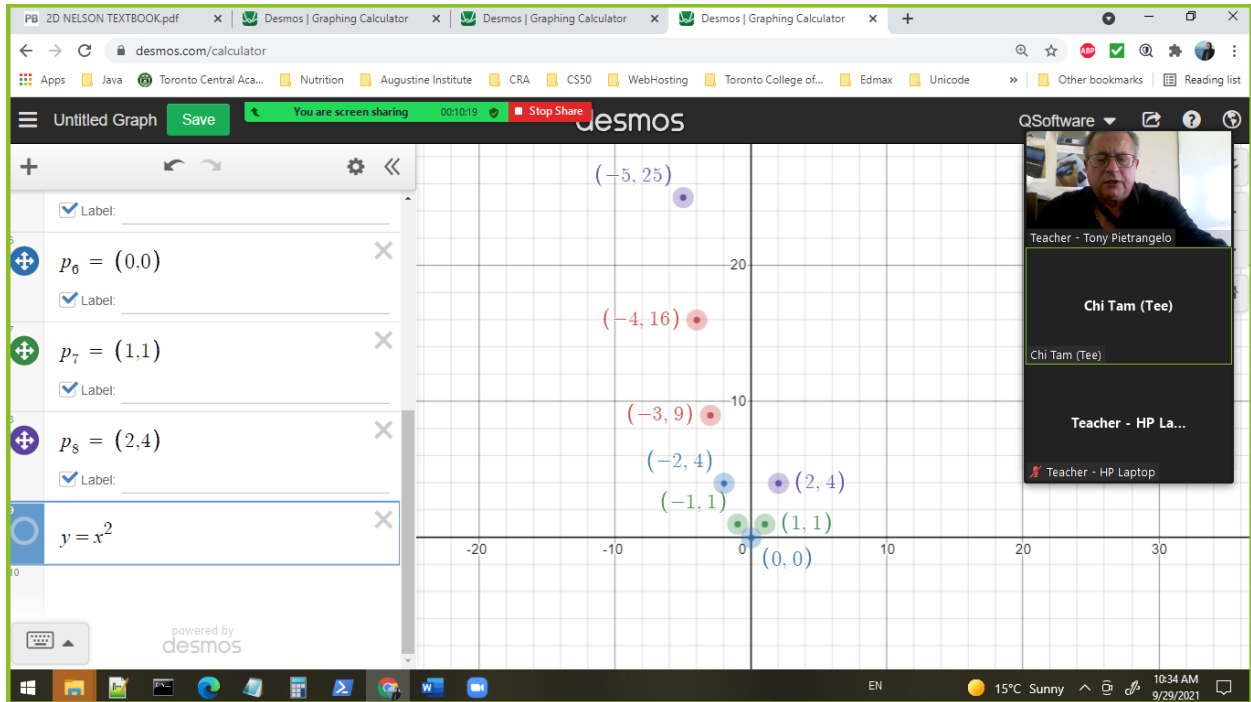


## Chapter 3: Quadratic Relations

### Activity 1: Exploring Parabolas

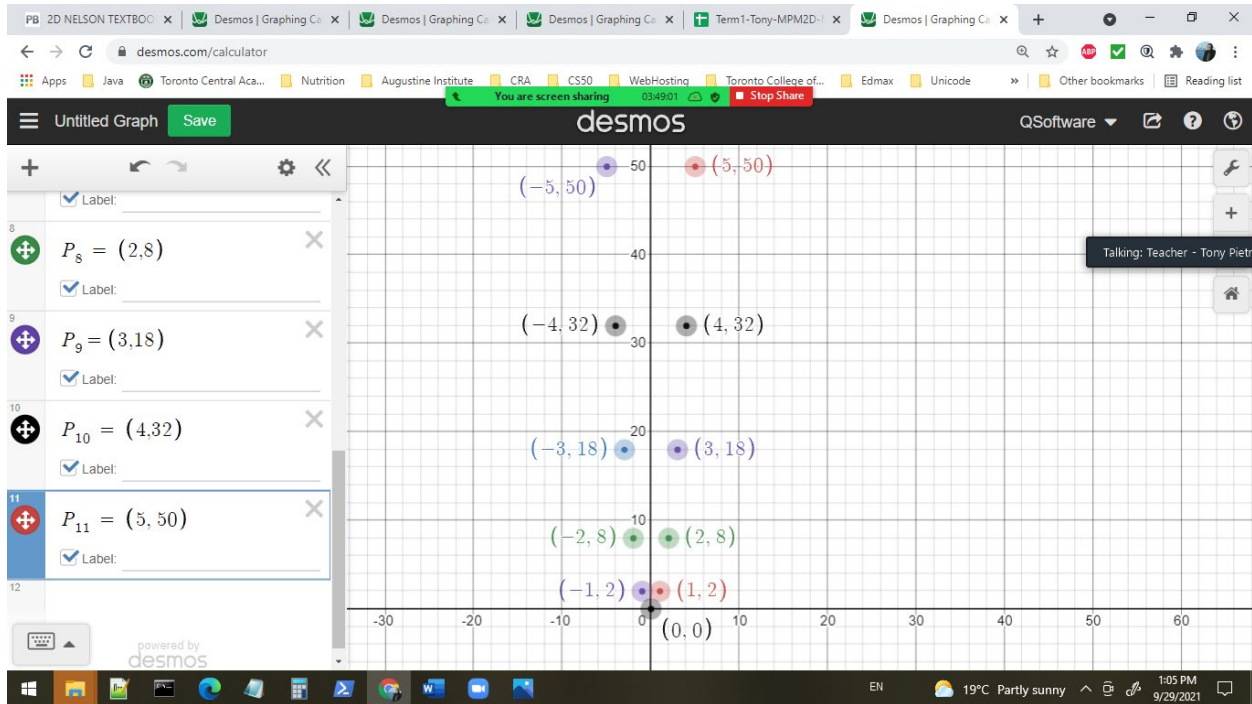
$$y = x^2$$

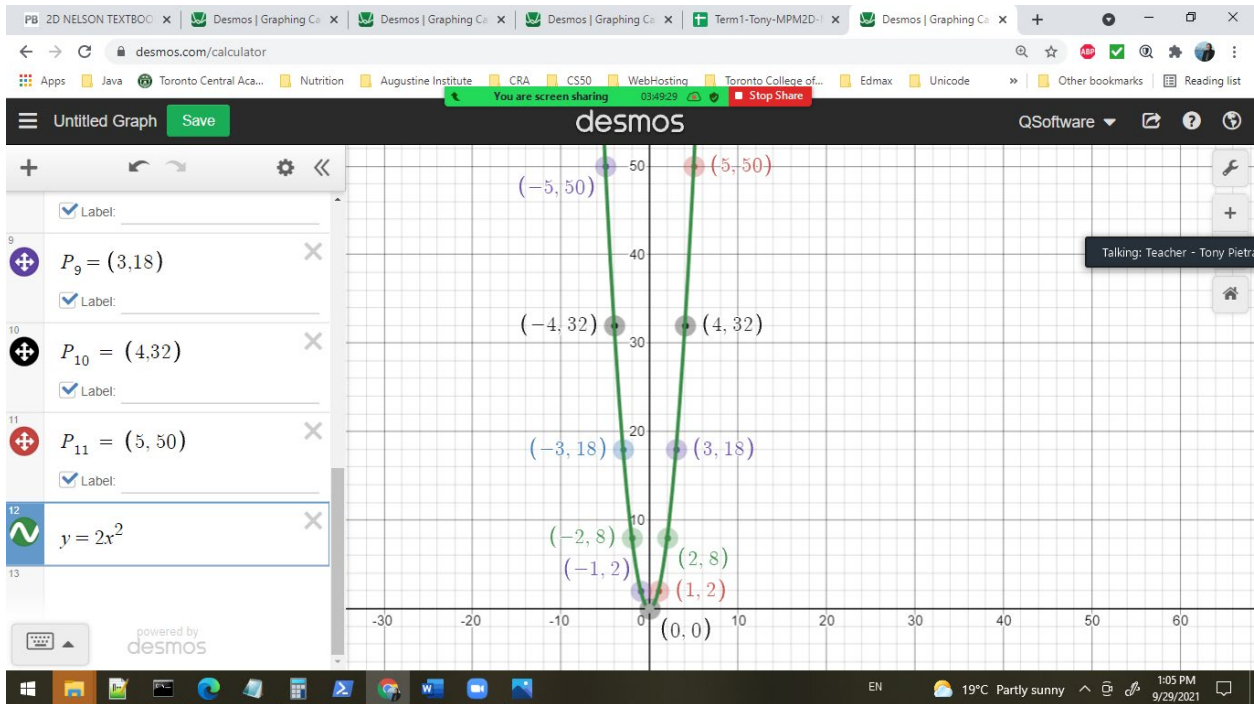


Activity:

b)  $y = 2x^2$

X Values	Y values $y = 2x^2$	Y Values	Points(x,y)
-5	$y = 2(-5)^2 = 50$	50	$P_1 = (-5, 50)$
-4	$y = 2(-4)^2$	32	$P_2 = (-4, 32)$
-3	$y = 2(-3)^2$	18	$P_3 = (-3, 18)$
-2	$y = 2(-2)^2$	8	$P_4 = (-2, 8)$
-1	$y = 2(-1)^2$	2	$P_4 = (-1, 2)$
0	$y = 2(0)^2$	0	$P_5 = (0, 0)$
1	$y = 2(1)^2$	2	$P_6 = (1, 2)$
2	$y = 2(2)^2$	8	$P_7 = (2, 8)$
3	$y = 2(3)^2$	16	$P_9 = (3, 18)$
4	$y = 2(4)^2$	32	$P_{10} = (4, 32)$
5	$y = 2(5)^2$	50	$P_{11} = (5, 50)$





c)  $y = -x^2$

do table for c)

X Values	Y values $y = -x^2$	Y Values	Points(x,y)
-5	$y = -(-5)^2 =$	50	$P_1 = (-5, 50)$
-4	$y = -(-4)^2 =$	32	$P_2 = (-4, 32)$
-3	$y = 2(-3)^2$	18	$P_2 = (-3, 18)$
-2	$y = 2(-2)^2$	8	$P_3 = (-2, 8)$
-1	$y = 2(-1)^2$	2	$P_4 = (-1, 2)$
0	$y = 2(0)^2$	0	$P_5 = (0, 0)$
1	$y = 2(1)^2$	2	$P_6 = (1, 2)$
2	$y = 2(2)^2$	8	$P_7 = (2, 8)$
3	$y = 2(3)^2$	16	$P_9 = (3, 18)$
4	$y = 2(4)^2$	32	$P_{10} = (4, 32)$
5	$y = 2(5)^2$	50	$P_{11} = (5, 50)$

do graph for the points in table c)

Take a screen snap shot and add to the document.

add the equation to the points

Take a screen snap shot add to your document.

Continue with d), and e)

Last part is screen below:

