## Area

While working in a group make sure you:

- Expect to make mistakes but be sure to reflect/learn from them!
- Are civil and are aware of your impact on others.
- Assume and engage with the strongest argument while assuming best intent.
- 1. Consider the curves described by  $y = x^2$  and  $y = 2x x^2$ . Draw both curves on the graph below and set up the integral that will find the area trapped between them. (You do not need to find the number right now!!)



2. Consider the cubes described by  $y = \cos(\frac{\pi}{2}x)$  and  $y = x^2 - 1$ . Sketch the function on the graph below and set up the integral that will find the area trapped between them. (You do not need to find the number right now!!)



3. Consider the curves described by  $y^2 - 4y = x$  and  $2y - y^2 = x$ . Draw both curves on the graph below and and set up the integral that will find the area trapped between them. (You do not need to find the number right now!!)

				v <sup>5</sup>					
				<sup>9</sup> 4					
				3					
				2					
				1			2		
-4	-3	-2	-1	0	1	2	3	4	<b>5</b>
				-1					A
				-2					
				-3			10		
				-4					