

1. Find a rectangular equation for the following curve, then graph it.

$$x = 2t - 1, y = t^2 + 2, \text{ for } t \text{ in } [-1, 1]$$

$$x + 1 = 2t$$

$$\frac{x+1}{2} = t$$

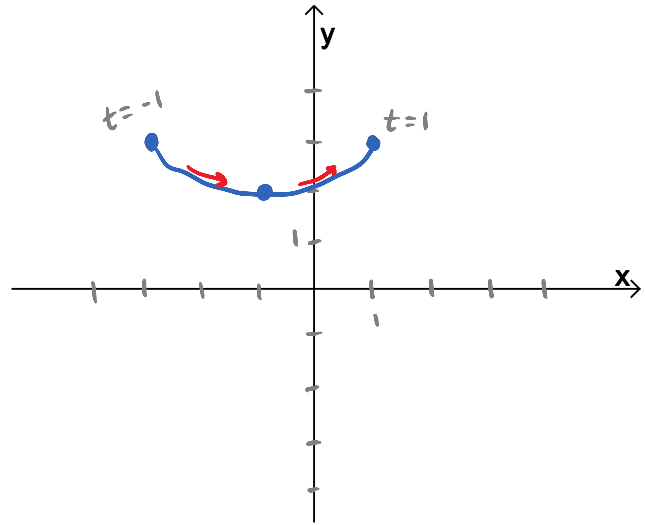
$$y = t^2 + 2$$

$$y = \left(\frac{x+1}{2}\right)^2 + 2$$

$$y = \frac{1}{4}(x+1)^2 + 2$$

↑
Parabola with vertex $(-1, 2)$
opening up.

t	x	y
-1	-3	3
0	-1	2
1	1	3



Q: What are the next two letters in the following series and why?

W A T N T L I T F S _ _