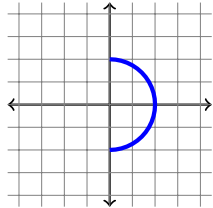
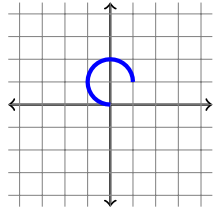
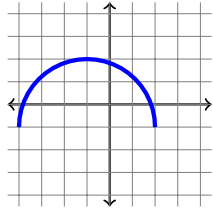
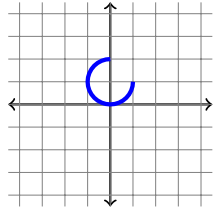
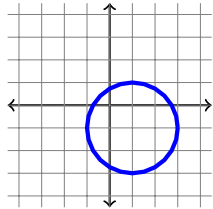
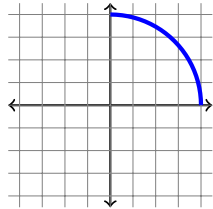


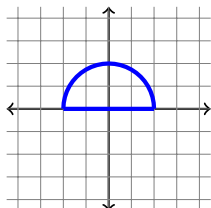
### Math 13 - Curve Parametrization Practice

**Instructions:** Parametrize until you can parametrize with your eyes closed.

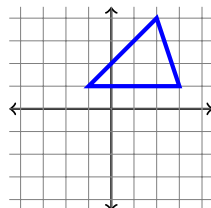
The line from $(-2, 1)$ to $(5, 1)$	The line from $(1, 3)$ to $(-3, 3)$
The line from $(2, -2)$ to $(2, 4)$	The line from $(2, 2)$ to $(3, 3)$
The line from $(-3, -2)$ to $(2, 6)$	The line from $(1, 1)$ to $(-4, 2)$
The line from $(2, 3, 1)$ to $(5, 3, 1)$	The line from $(-1, -1, 6)$ to $(-1, -1, 2)$
The line from $(1, 0, 0)$ to $(0, 0, 2)$	The line from $(-1, -2, -3)$ to $(1, -2, 3)$
The line from $(2, 2, 3)$ to $(3, 3, 4)$	The line from $(4, 1, 2)$ to $(-1, -4, 0)$
The curve $y = x$ from $(1, 1)$ to $(-1, -1)$	The curve $y = 2x - 3$ from $(2, 1)$ to $(4, 5)$
The curve $y = x^2$ from $(-1, 1)$ to $(2, 4)$	The curve $y = \sqrt{x}$ from $(4, 2)$ to $(0, 0)$
The curve $y = \sin(x) \cos(x) \ln(x)x^{3/2}$ from $(1, 0)$ to $(3, \sin(3) \cos(3) \ln(3)3^{3/2})$	The curve $x = y^3 + 1$ from $(9, 2)$ to $(2, 1)$
The curve $x + 3 = y - 2$ from $(1, 6)$ to $(-2, 3)$	The curve $x^2 + y^2 = 4$ from $(2, 0)$ to $(-2, 0)$
<p>The circle shown below, counterclockwise:</p> 	<p>The circle shown below, clockwise:</p> 
<p>The circle shown below, counterclockwise:</p> 	<p>The circle shown below, clockwise:</p> 
<p>The circle shown below, counterclockwise:</p> 	<p>The circle shown below, clockwise:</p> 

Math 13 - Curve Parametrization Practice

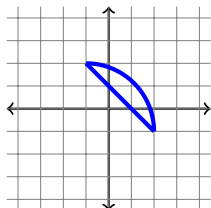
The curve shown below, counterclockwise:



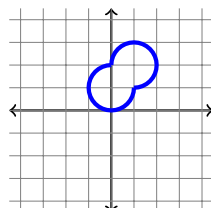
The curve shown below, clockwise:



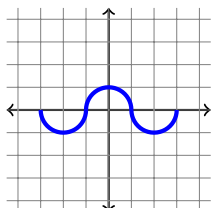
The curve shown below, counterclockwise:



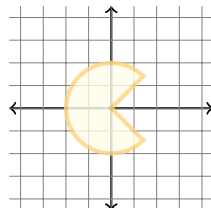
The curve shown below, clockwise (both components are parts of circles):



The curve shown below, from left to right (all components are parts of circles):



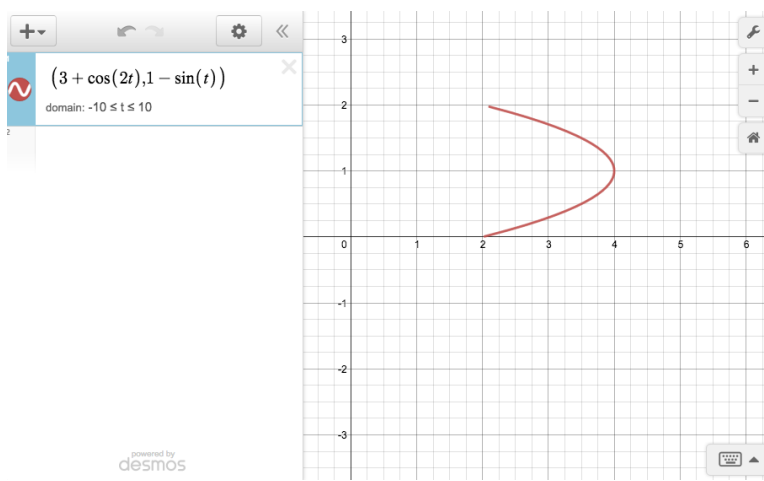
The curve shown below, clockwise:



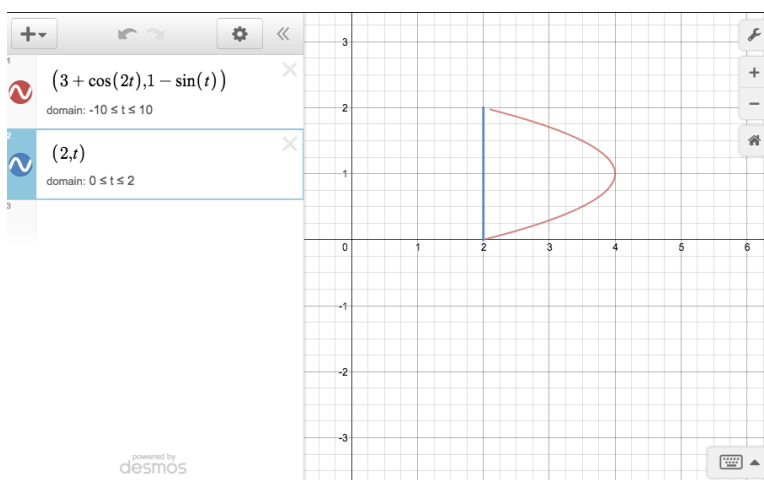
## Math 13 - Curve Parametrization Practice

Checking your answers: <https://www.desmos.com/calculator>

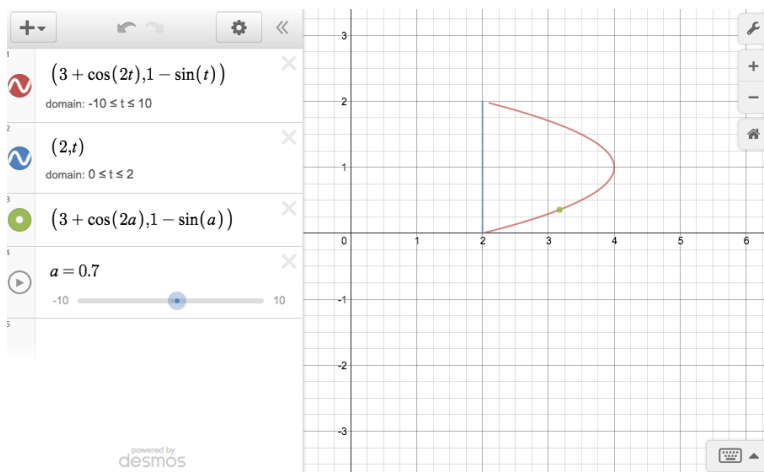
Enter the parametrization and domain to see the line.



Enter separate curves on separate lines.

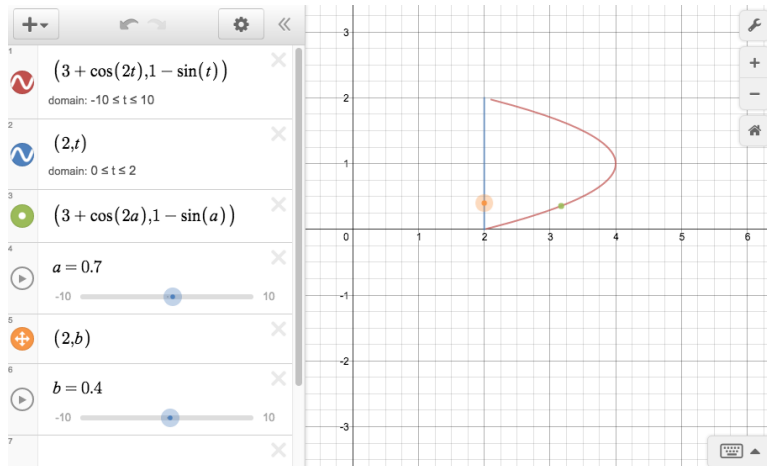


To see the direction, enter the curve on another line using a new variable  $a$  instead of  $t$ , and click “add slider”.



## Math 13 - Curve Parametrization Practice

Do the same with other lines, using other variables ( $b$ ,  $c$ , etc).



For 3D, you can use WolframAlpha:

parametric plot ☆ ☰

[Examples](#) [Random](#)

Assuming "parametric plot" refers to a computation | Use as a [general topic](#) instead

- x component of parametric plot:
- y component of parametric plot:
- z component of parametric plot:
- upper limit 1:
- lower limit 1:
- variable 1:

Also include:  variable 2,  lower limit 2 and  upper limit 2

Input interpretation:

	cos(u)	
parametric plot	sin(u)	u = 0 to π
	u	

Parametric plot:

[Enable interactivity](#)

Arc length of parametric curve: [More digits](#)

$$\int_0^\pi \sqrt{2} \, du = \sqrt{2} \pi \approx 4.44288$$