

Express  $y$  as a function of  $x$  in  $x^2 + y^5 = 10$

1) Move  $x^2$  to the right side with subtraction.

$$y^5 = 10 - x^2$$

2) Now take the 5th root of both sides.

$$y = \sqrt[5]{10 - x^2}$$

3) When you plot this, you get the curve below.  
It passes the vertical line test for functions.

