

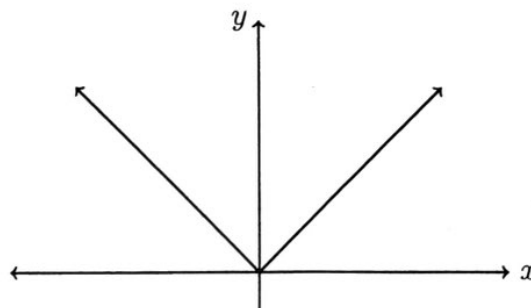
11.13 Exit Quiz: Function identification

HSF.BF.B.3

Identify each function with its name and the equation of its parent (simplest example).  
(e.g. line, parabola, square root, absolute value, reciprocal, circle, sine)

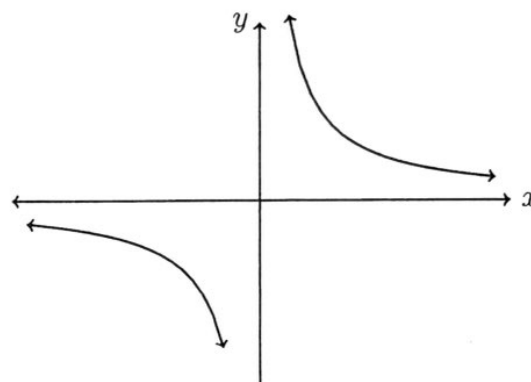
1. Name: Absolute value

Equation:  $y = |x|$



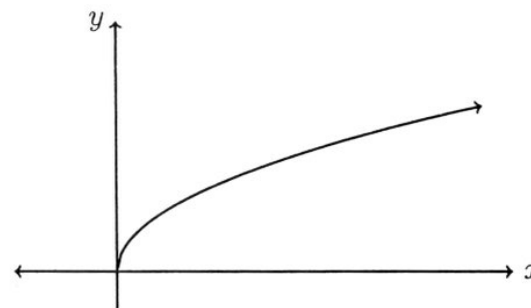
2. Name: Reciprocal function

Equation:  $y = \frac{1}{x}$



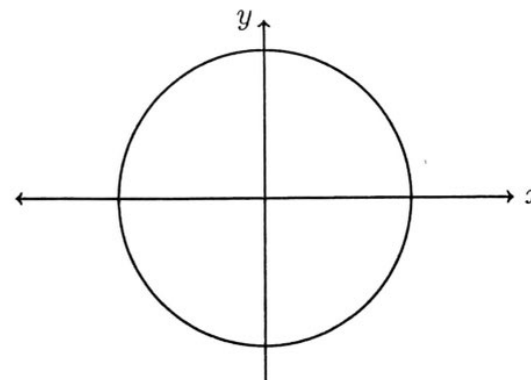
3. Name: Square root

Equation:  $y = \sqrt{x}$



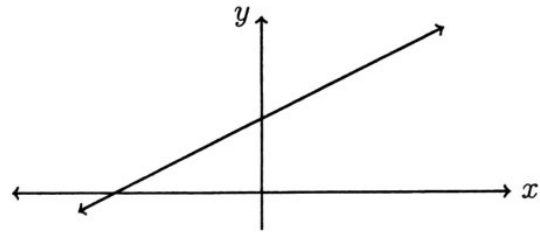
4. Name: Circle

Equation:  $x^2 + y^2 = 1$



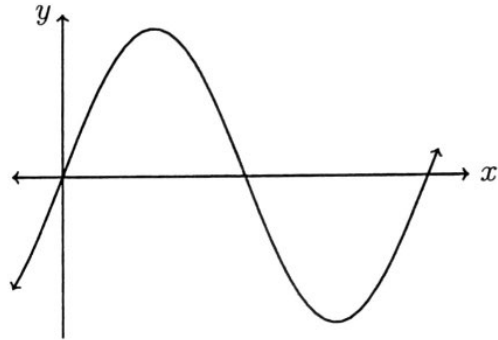
5. Name: *Line*

Equation:  $y = mx + b$



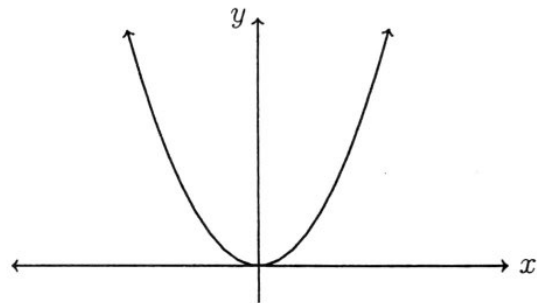
6. Name: *Sine*

Equation:  $y = \sin x$



7. Name: *Parabola*

Equation:  $y = x^2$



8. Graph the equation  $y + 1 = (x - 2)^2$  on the grid at right for  $-1 \leq x \leq 5$ .

(a) Mark and label the vertex as a coordinate pair.

(b) Write down the  $x$ -intercepts.

$(1, 0)$   $(3, 0)$

(c) Mark and label the  $y$ -intercept.

(d) Draw the axis of symmetry and label it with its equation.

