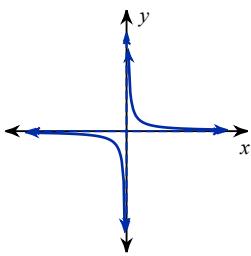


Parent Functions & Rate of Change

Date _____

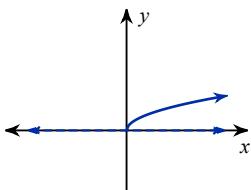
Match each graph on the left with its parent function on the right.

1)



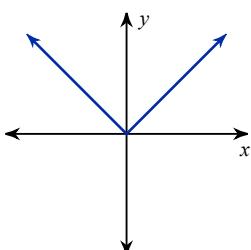
2) $y = x^3$

3)



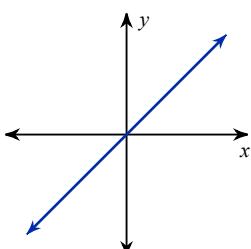
4) $y = \frac{1}{x}$

5)



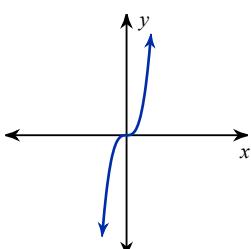
6) $y = x$

7)



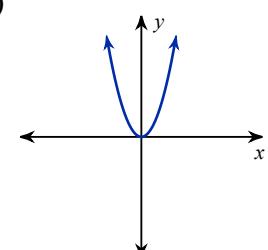
8) $y = x^2$

9)



10) $y = |x|$

11)



12) $y = \sqrt{x}$

For each function, a) State what type of graph it is, b) Find the rate of change between the given points.

13) $y = x^2 + 5$; $[-7, 6]$

a)

14) $y = x^3 - 4$; $[1, 8]$

a)

b)

b)

15) $y = \frac{12}{x+1}$; $[-3, 2]$

a)

16) $y = |4x - 10|$; $[-5, 1]$

a)

b)

b)

17) $y = x - 11$; $[-4, -1]$

a)

18) $y = \sqrt{3x}$; $[0, 27]$

a)

b)

b)

19) $y = -4x^2$; $[-8, -3]$

a)

20) $y = -\frac{18}{2x}$; $[-1, 3]$

a)

b)

b)