

8.2 Parent Functions

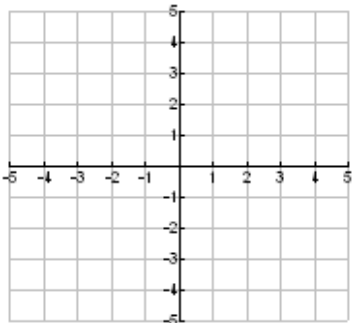
Math 2B

Name _____

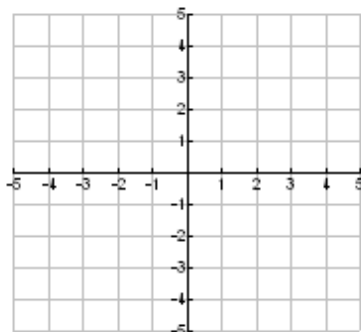
Hour _____

Draw a sketch of the following graph descriptions.

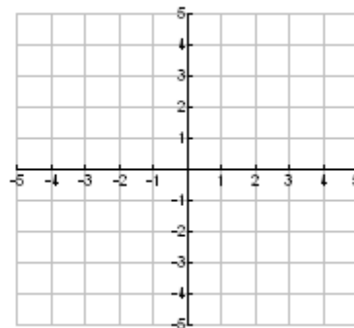
1. $y = x$ Linear



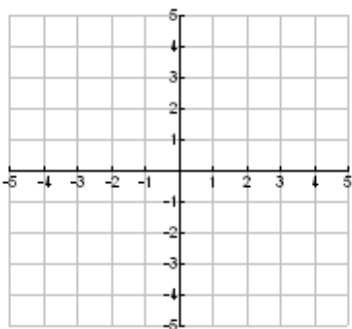
2. $f(x) = x^3$ Cubic



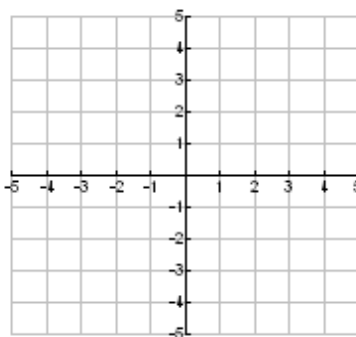
3. $y = |x|$ Absolute Value



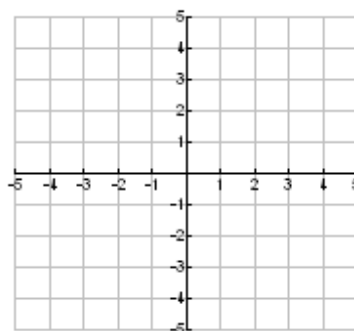
4. $f(x) = \sqrt{x}$ Root



5. $f(x) = x^2$ Quadratic/Parabola



6. $y = a^x$ Exponential



State which basic function shape corresponds to the following equation.

7. $y = 3\sqrt[3]{x} - 3$

8. $f(x) = -5 + x$

9. $y = -\sqrt{x} + 4$

10. $f(x) = 7x + 5$

11. $y = -5|x + 1| - 4$

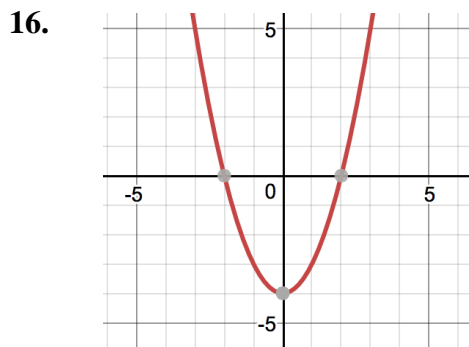
12. $g(x) = 4^{x-3}$

13. $f(x) = 3(x - 1)^3$

14. $y = 3^{x-2}$

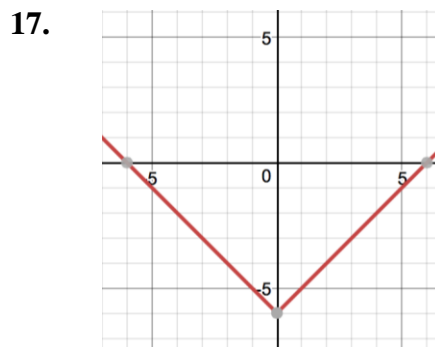
15. $h(x) = x^2 + 4$

For each graph state the parent function and the parent equation.



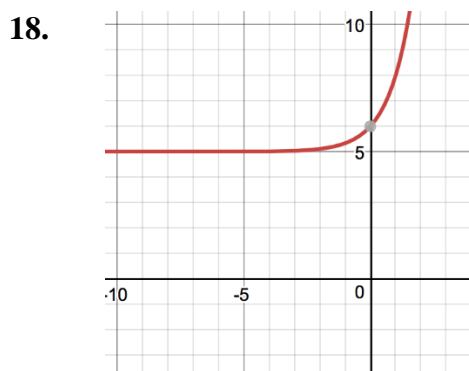
Parent Function: _____

Parent Equation: _____



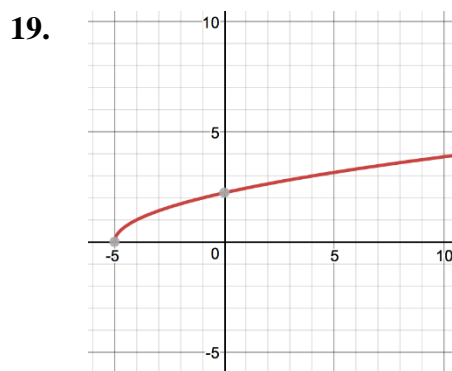
Parent Function: _____

Parent Equation: _____



Parent Function: _____

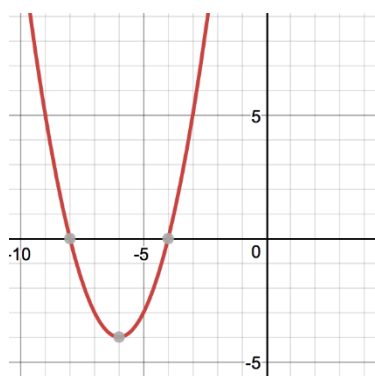
Parent Equation: _____



Parent Function: _____

Parent Equation: _____

20. Identify the parent function, the domain, and the range of the graphed function.



Parent Function: _____

Parent Equation: _____

Domain: _____

Range: _____