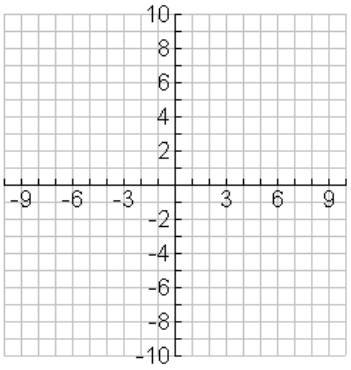
Algebra 2-Trig
Unit 1: Lesson 3 Transformations of Graphs

Name_____
Hour_____

Graph the following functions without using technology. Feel free to use a graphing calculator to check your answer, but you should be able to look at the function and apply what you learned in the lesson to move its parent function. Also, state the domain and range for each function.

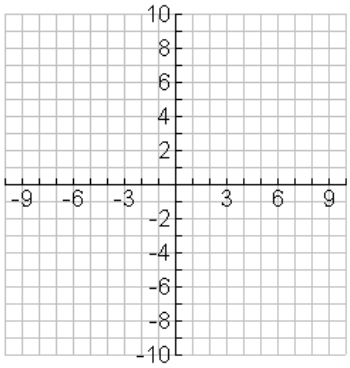
1. $f(x) = (x-2)^2 + 4$

Domain:_____
Range:_____



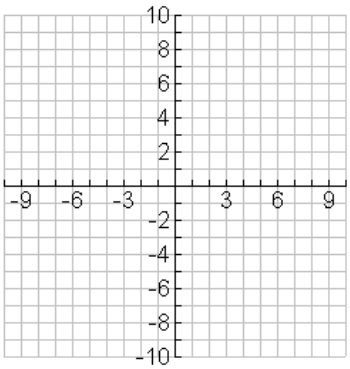
2. $f(x) = -(x-3)^3 - 1$

Domain:_____
Range:_____



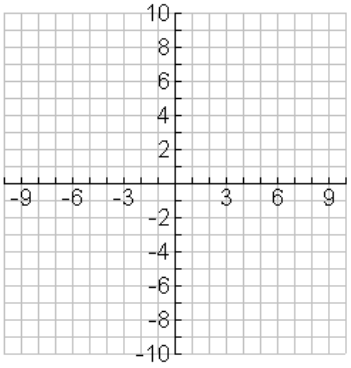
3. $f(x) = \sqrt{x+1} + 4$

Domain:_____
Range:_____



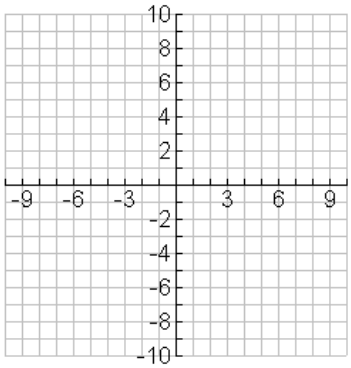
4. $f(x) = -\sqrt[3]{x-1} + 5$

Domain:_____
Range:_____



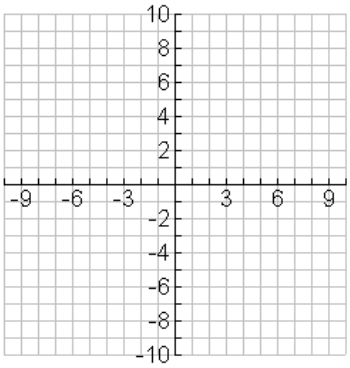
5. $f(x) = |x-3| - 2$

Domain:_____
Range:_____



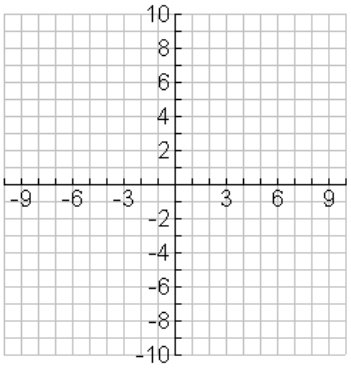
6. $f(x) = 2^{x+1} - 3$

Domain:_____
Range:_____



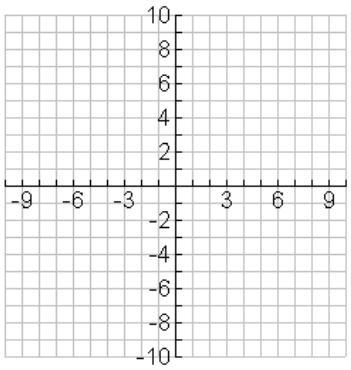
7. $f(x) = -(x+5)^2 - 1$

Domain:_____
Range:_____



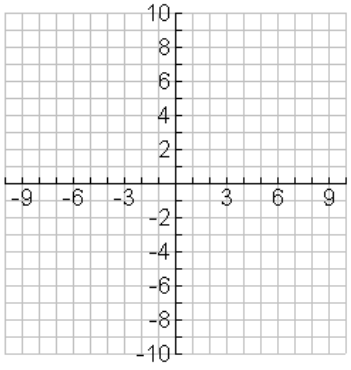
8. $f(x) = (x+3)^3 + 4$

Domain:_____
Range:_____



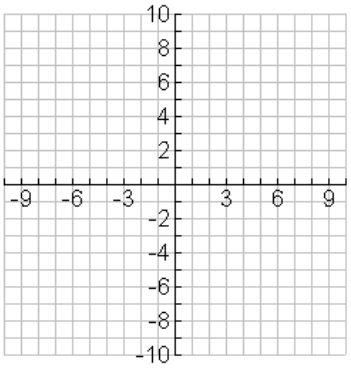
9. $f(x) = -\sqrt{x-3} - 6$

Domain:_____
Range:_____



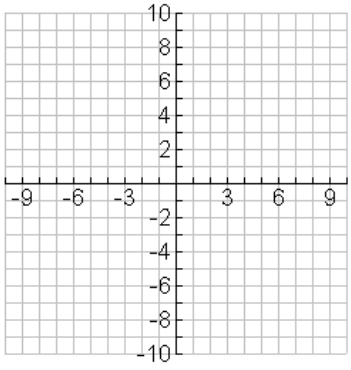
10. $f(x) = \sqrt[3]{x+2} - 4$

Domain:_____
Range:_____



11. $f(x) = -|x+2| - 7$

Domain:_____
Range:_____



12. $f(x) = 2^{x-3} + 2$

Domain:_____
Range:_____