

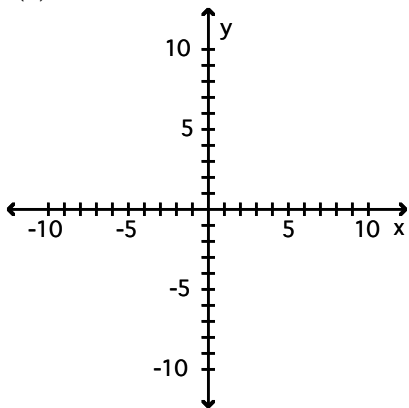
# Transformations of Functions

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

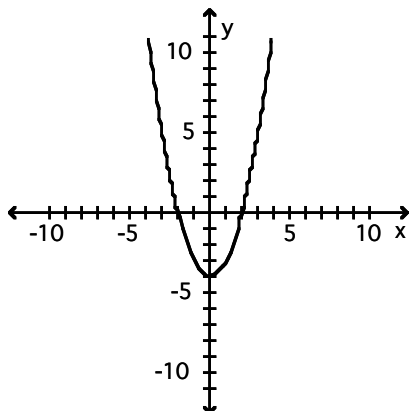
Graph the function by starting with the graph of the basic function and then using the techniques of shifting, compressing, stretching, and/or reflecting.

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

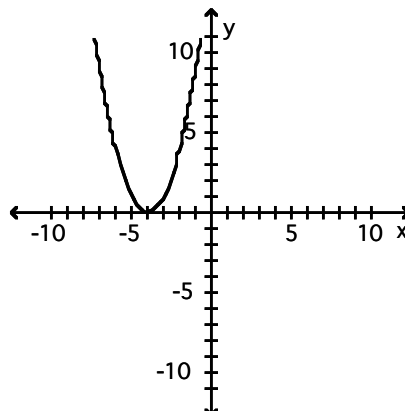
1) \_\_\_\_\_



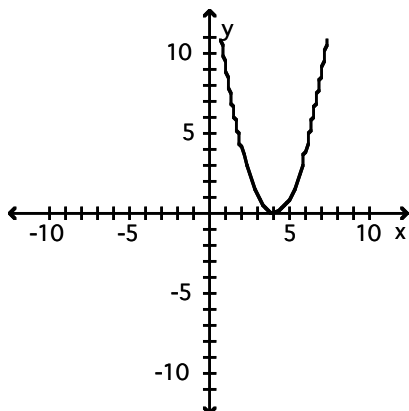
A)



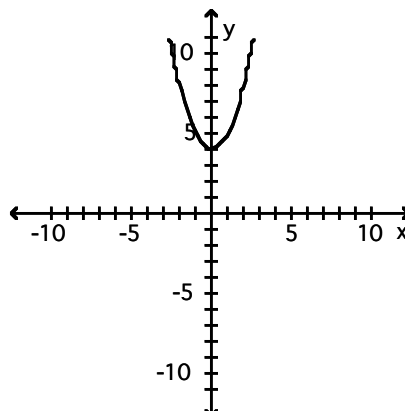
B)



C)

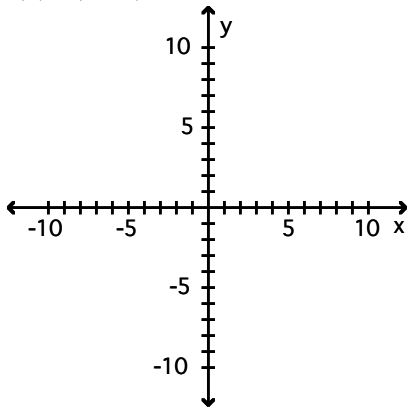


D)

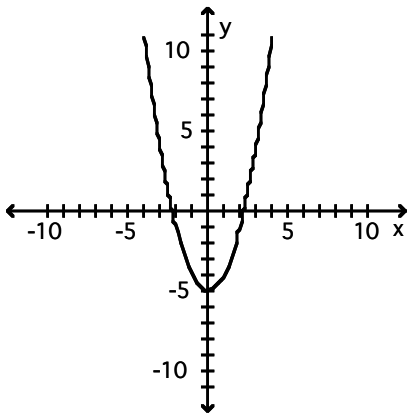


2)  $f(x) = (x+5)^2$

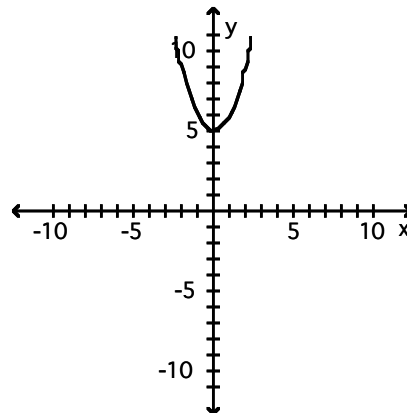
2) \_\_\_\_\_



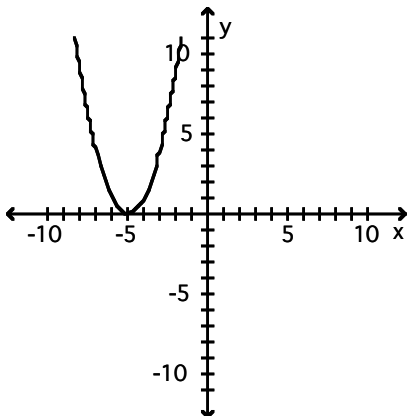
A)



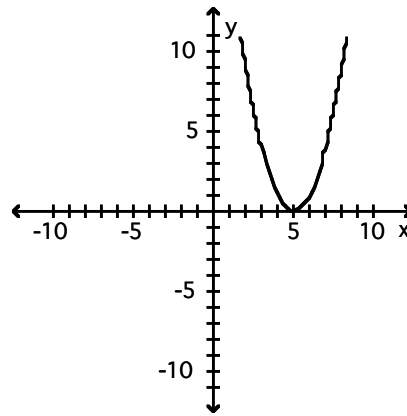
B)



C)



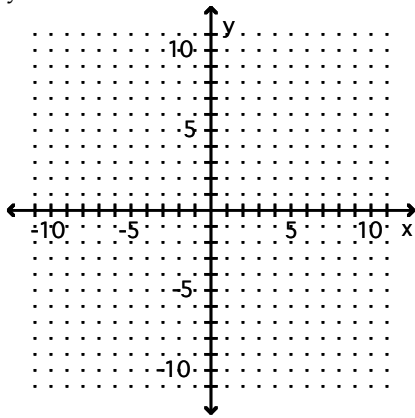
D)



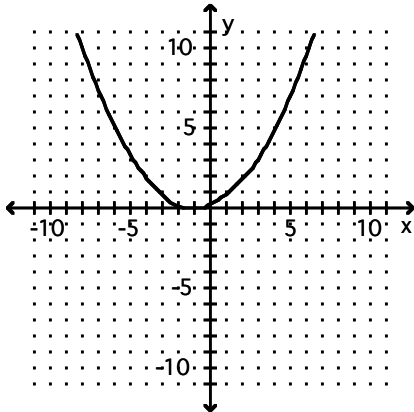
Graph the function.

3)  $y = 5x^2 - 1$

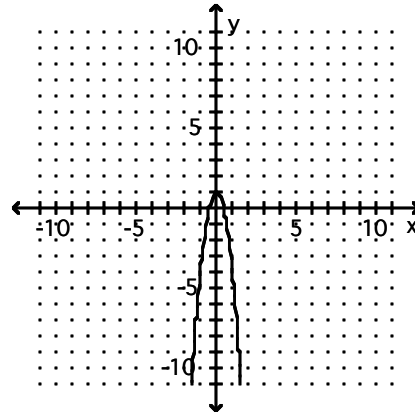
3) \_\_\_\_\_



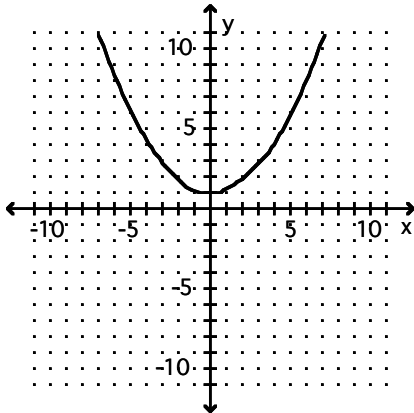
A)



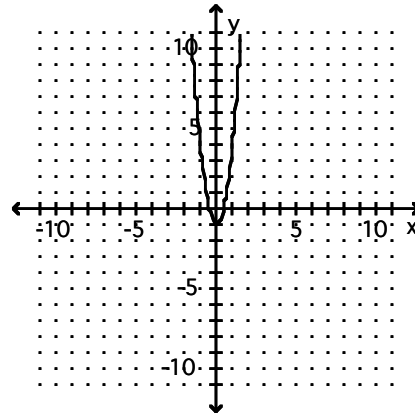
B)



C)

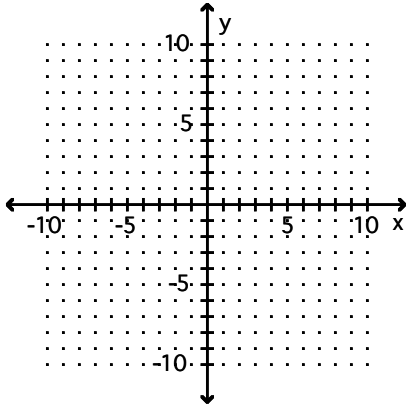


D)

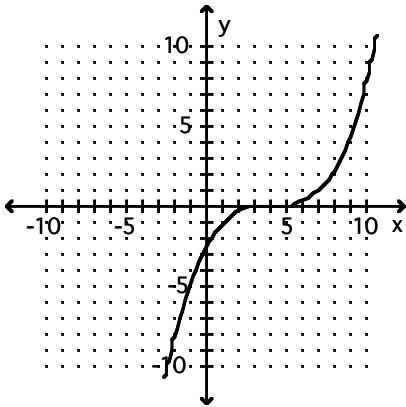


4)  $y = \frac{1}{3}(x - 4)^3$

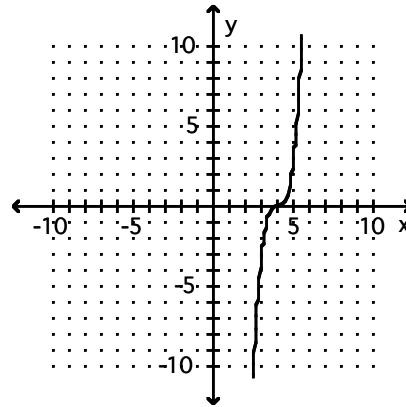
4) \_\_\_\_\_



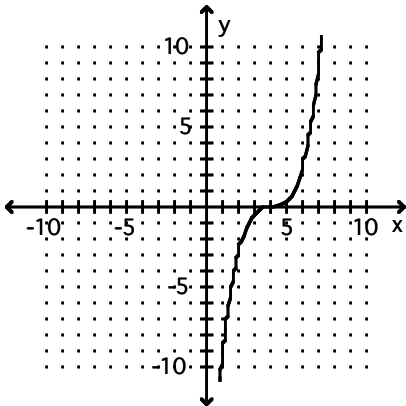
A)



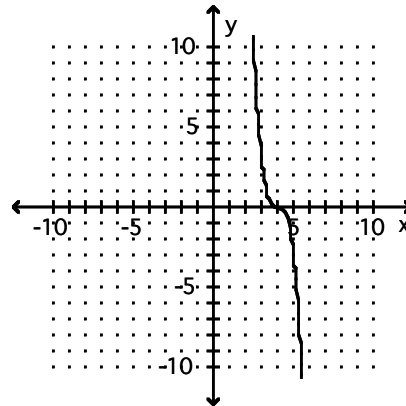
B)



C)

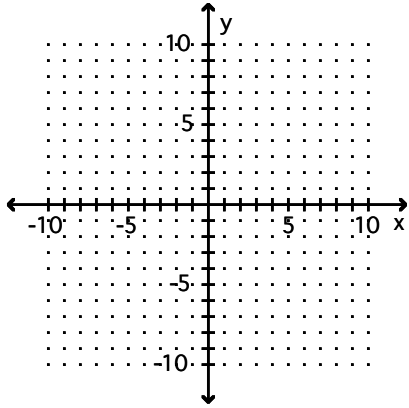


D)

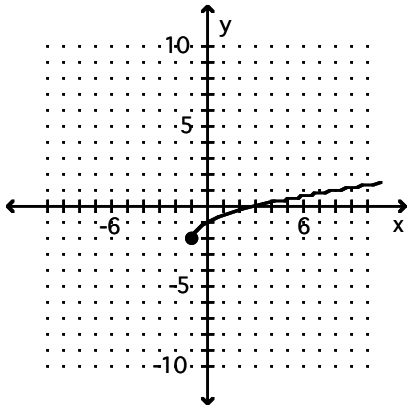


5)  $g(x) = -\sqrt{x+1} + 2$

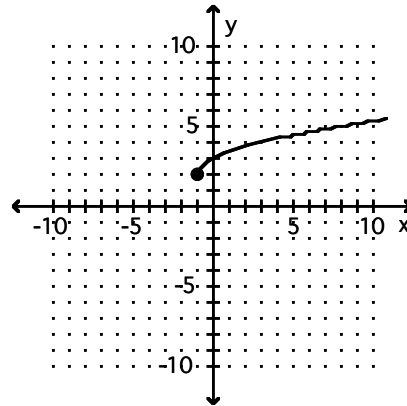
5) \_\_\_\_\_



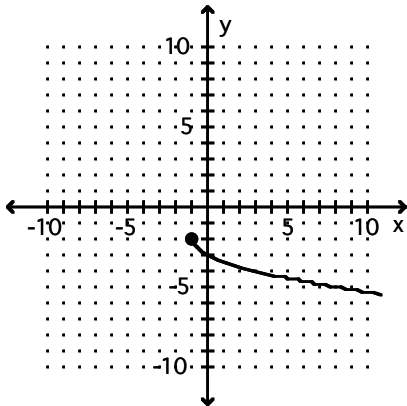
A)



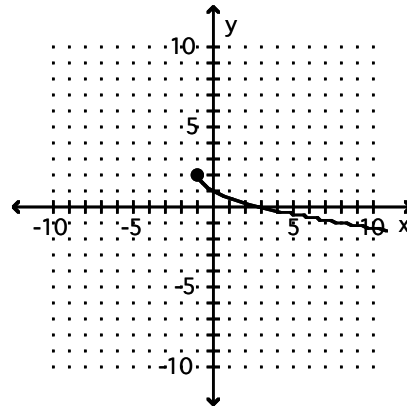
B)



C)

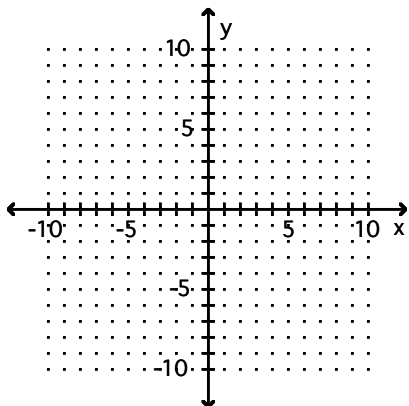


D)

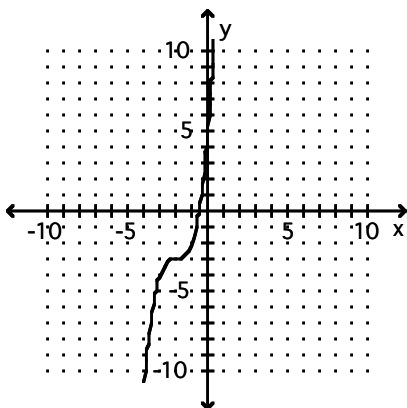


6)  $g(x) = -(x+2)^3 - 3$

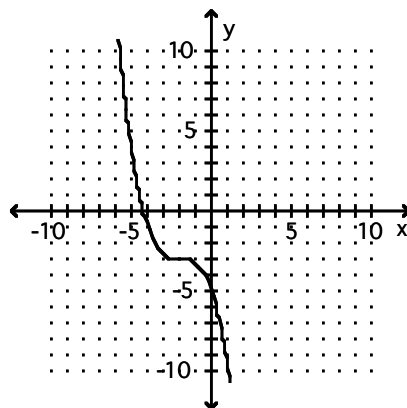
6) \_\_\_\_\_



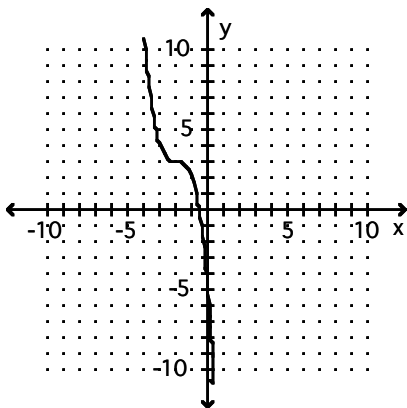
A)



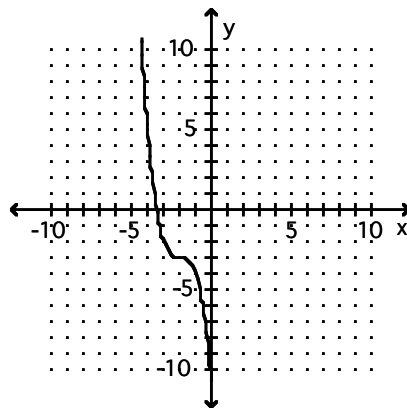
B)



C)



D)



Answer Key

Testname: TRANSFORMATIONS OF FUNCTIONS

- 1) D
- 2) C
- 3) D
- 4) C
- 5) D
- 6) D