

Unit 1 Day 3 HW(1)

1. Given the function $f(x) = x^2$, write the function whose graph of $f(x)$ is:

- A. shifted 6 units to the left
- B. reflected about the y-axis
- C. reflected about the x-axis
- D. shifted 5 units up
- E. vertically stretched by a factor of 4
- F. horizontally stretched by a factor of $1/3$

2. Given the function $f(x) = |x|$, write the function whose graph of $f(x)$ is:

- A. shifted 5 units to the right
- B. reflected about the y-axis
- C. reflected about the x-axis
- D. shifted 3 units down
- E. vertically compressed by a factor of $1/4$
- F. horizontally shrunk by a factor of 3

3. Write a function that is obtained after the following transformations are applied to $y = |x|$.

- A. shift 2 units up, reflect about the x-axis then about the y-axis.
- B. reflect over the x-axis, shift 3 units left and 2 units up.

4. Consider the following function $f(x)$:

- A. Graph $f(x - 3)$
- B. Graph $f(-x)$
- C. Graph $-f(x)$

