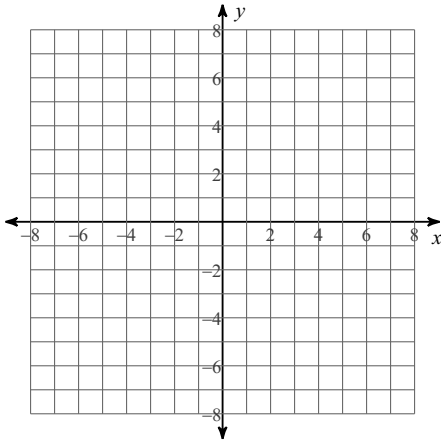


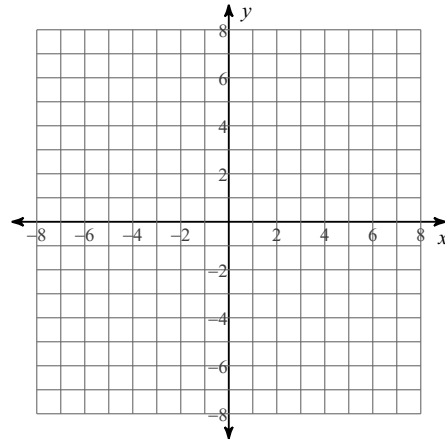
## HW30: Reflections

**Graph the four basic functions.**

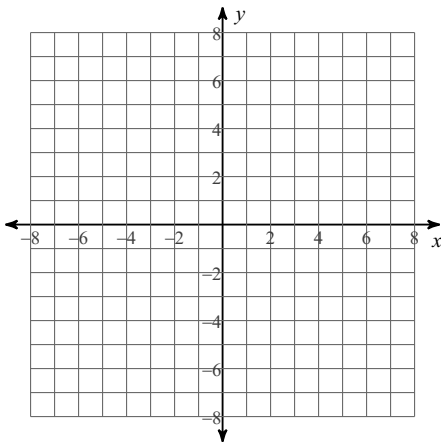
1) Linear



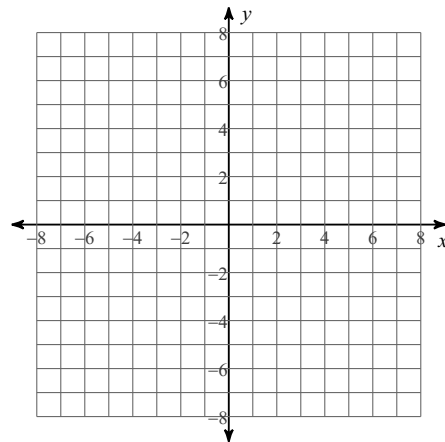
2) Absolute Value



3) Quadratic



4) Square Root



**Identify the parent function and predict what will happen to the graph of the function.**

5)  $f(x) = -\sqrt{x}$

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

7)  $f(x) = -|x| - 7$

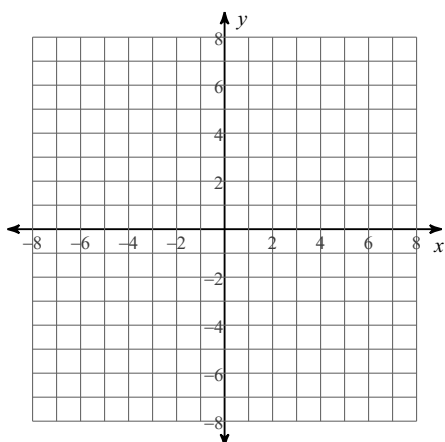
8)  $f(x) = -|x| + 2$

9)  $f(x) = -\sqrt{-x} + 10$

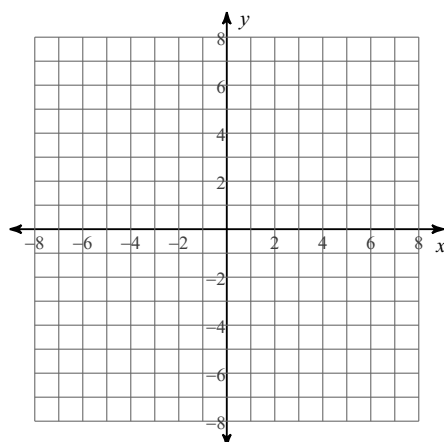
10)  $f(x) = -x^2 + 16$

**Graph the functions.**

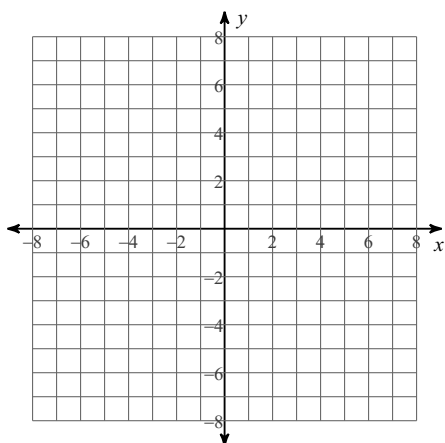
11)  $f(x) = -\sqrt{x}$



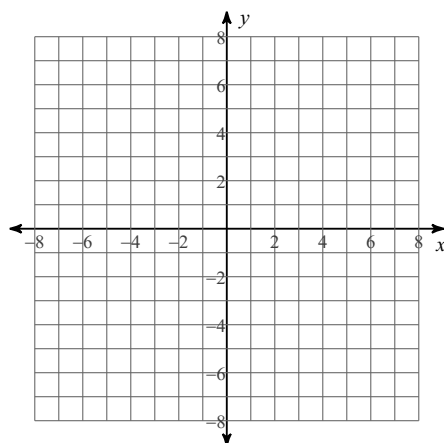
12)  $f(x) = \sqrt{-x}$



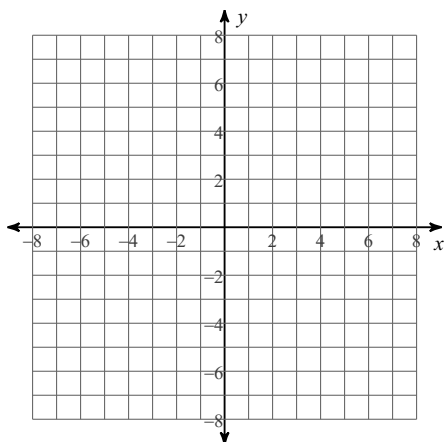
13)  $f(x) = |x| - 5$



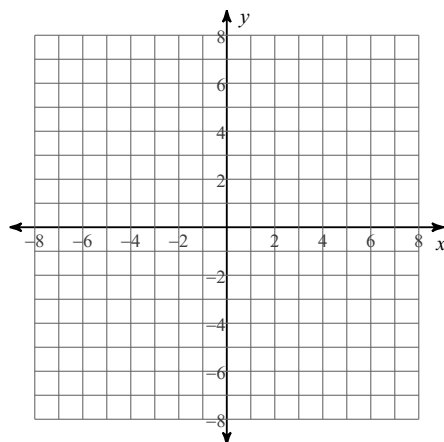
14)  $f(x) = -|x|$



15)  $f(x) = -x^2$

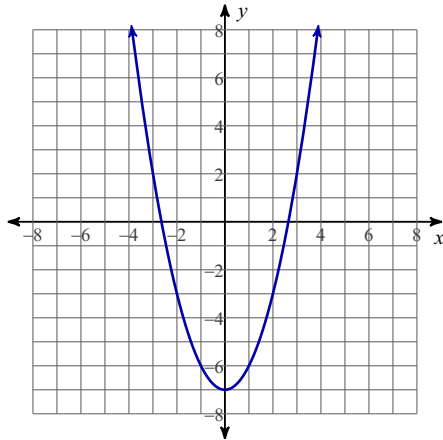


16)  $f(x) = -x^2 + 4$

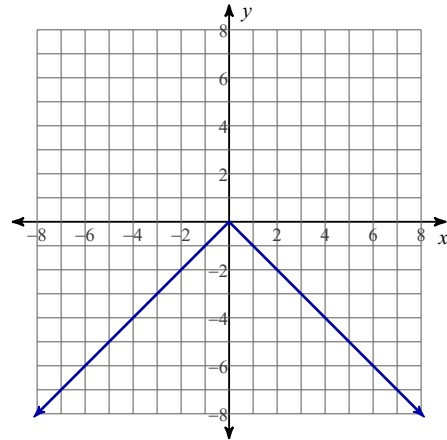


Write the function definition that describes the graph.

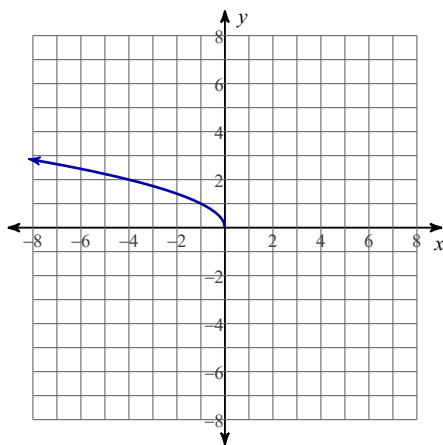
17)



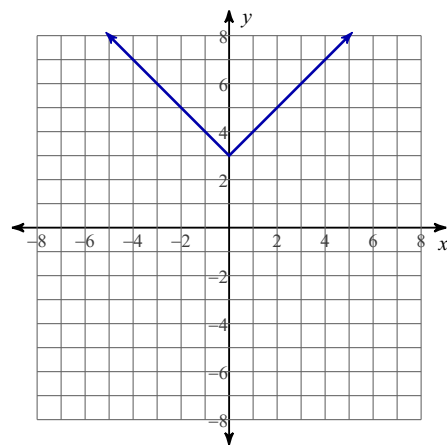
18)



19)



20)



21) Draw and label the function notation diagram. (See Day 25 PowerPoint if you need to see it again.)

22) Make sure your notes are ready for next week's Notebook Check. Be sure to include all the handouts I gave you in class and write full-sentence summaries for each lesson. Notebook Check #7 will cover lessons 4.5 - 4.8.

Solve each equation. Use a separate piece of paper.

23)  $-108 = 4(7n + 8)$

24)  $-3p - 6(5p - 4) = -141$

25)  $b - 5 = 3 + 2b$

26)  $2 + n - 2 + 6n = 8n - 5$

Write the slope-intercept form of the equation of each line.

27)  $y - 1 = 3(x - 3)$

28)  $y + 2 = -\frac{3}{2}(x + 2)$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

29) Slope =  $-\frac{9}{4}$ , y-intercept = 5

30) Slope = -3, y-intercept = 4