

# Trig 6-2 Parent Graphs

Name: \_\_\_\_\_

Time Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total Time = \_\_\_\_\_

For each parent graph, describe the transformations that have taken place in the related graph of each function.

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

a.)  $y = x^2 + 4$  \_\_\_\_\_

b.)  $y = 2x^2$  \_\_\_\_\_

c.)  $y = -x^2$  \_\_\_\_\_

d.)  $y = (x + 3)^2$  \_\_\_\_\_

e.)  $y = (x - 1)^2 + 2$  \_\_\_\_\_

f.)  $y = -x^2 - 3$  \_\_\_\_\_

g.)  $y = 3x^2 + 4$  \_\_\_\_\_

h.)  $y = \frac{1}{2}(x - 1)^2 + 1$  \_\_\_\_\_

2.  $f(x) = |x|$

a.)  $y = |x| + 3$  \_\_\_\_\_

b.)  $y = |x + 4|$  \_\_\_\_\_

c.)  $y = 2|x| + 3$  \_\_\_\_\_

d.)  $y = |x - 4| + 2$  \_\_\_\_\_

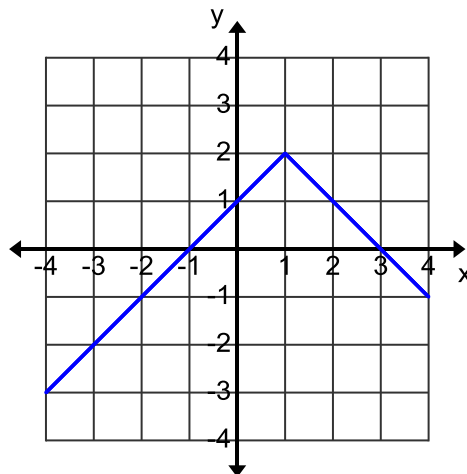
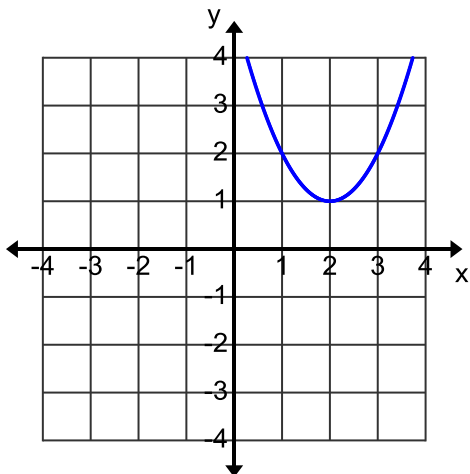
e.)  $y = -|x| + 3$  \_\_\_\_\_

f.)  $y = 3|x + 4|$  \_\_\_\_\_

g.)  $y = .3|x - 7|$  \_\_\_\_\_

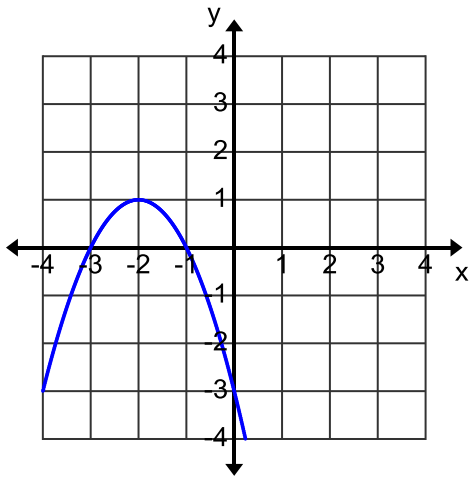
h.)  $y = -4|x - 1| + 6$  \_\_\_\_\_

Give the equation for the graph that appears to have been graphed.

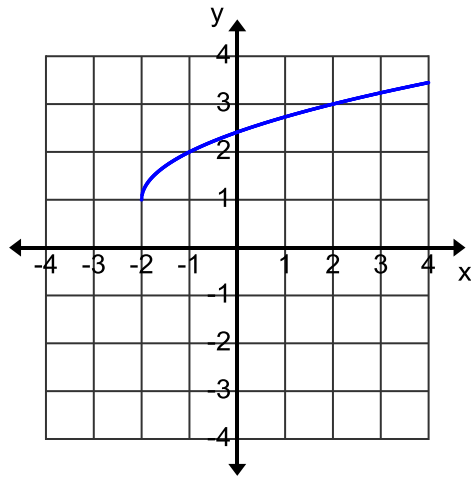


3. \_\_\_\_\_

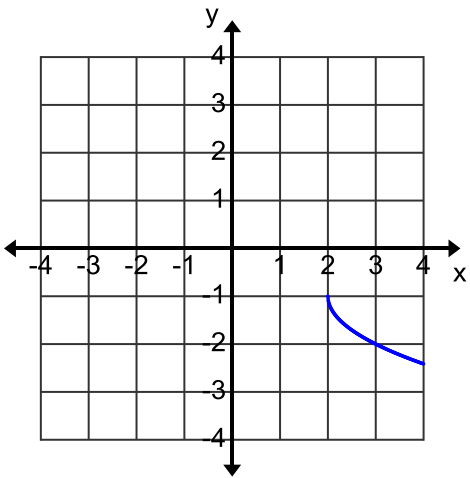
4. \_\_\_\_\_



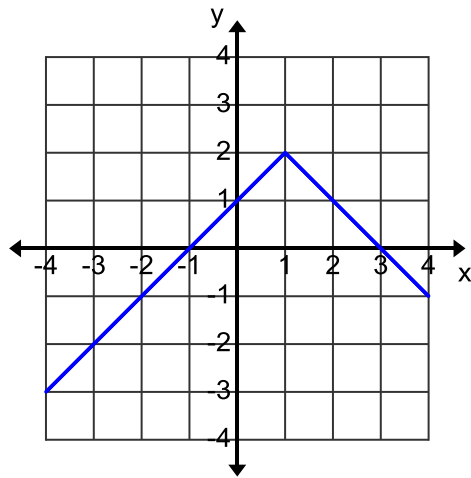
5. \_\_\_\_\_



6. \_\_\_\_\_



7. \_\_\_\_\_



8. \_\_\_\_\_