

Name: _____

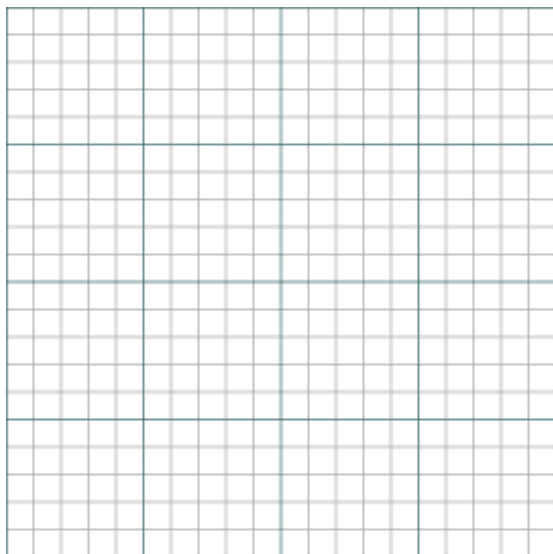
Date: _____

Examples of Function Transformations

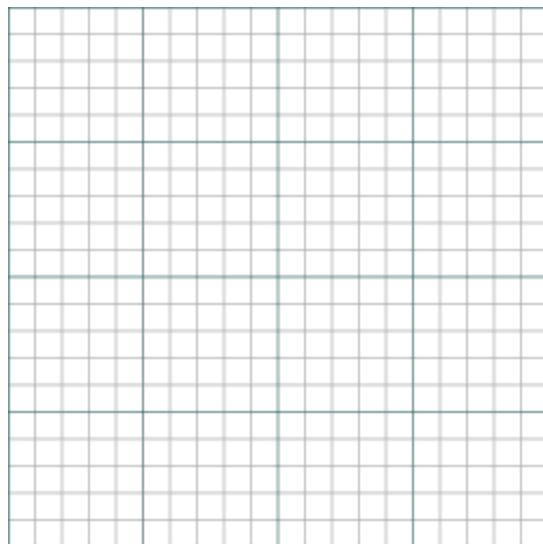
Chapter 1, Lesson 2

Questions 1 through 6: Graph the function *and its parent function*. Label the functions clearly. Then describe the transformation using good mathematical language.

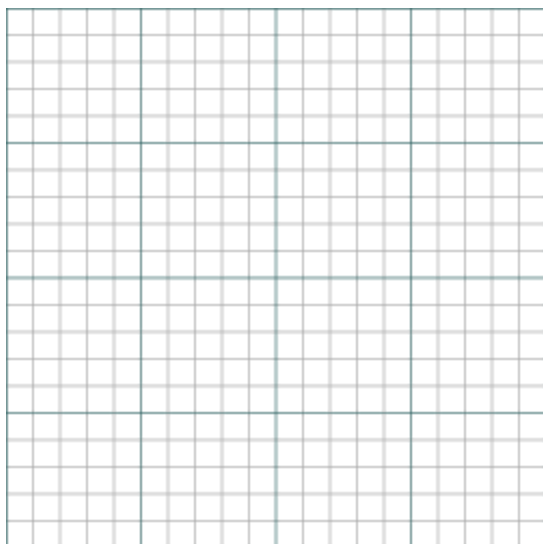
1. $g(x) = x + 3$



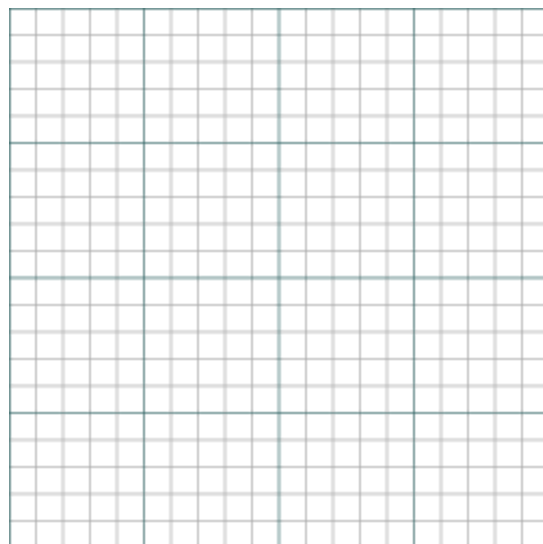
2. $h(x) = (x - 2)^2$



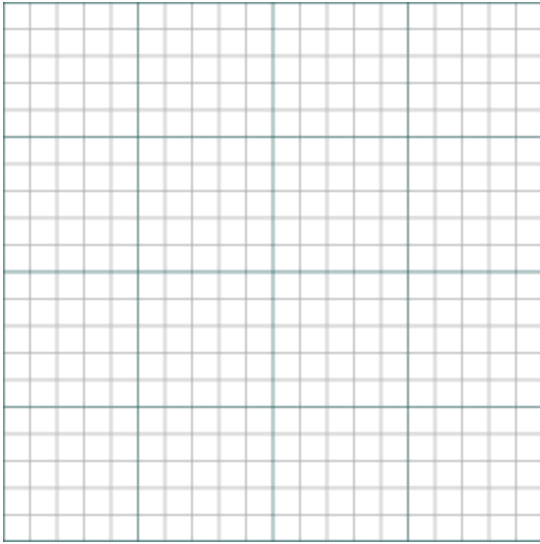
3. $c(x) = 0.2|x|$



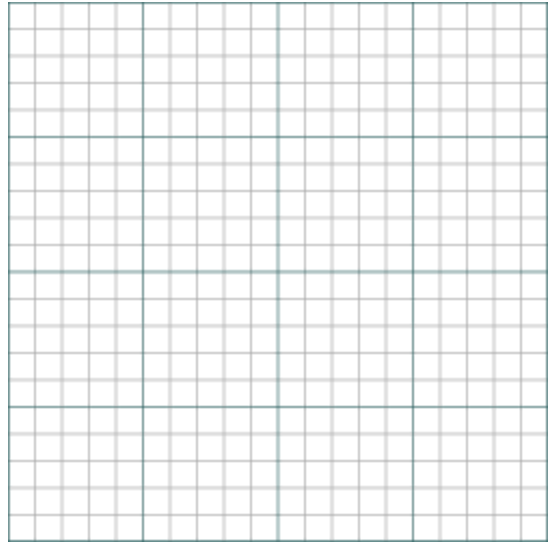
4. $h(x) = -\frac{1}{4}x + 5$



5. $j(x) = \frac{3}{2} x^2$



6. $k(x) = 3(x - 5)^2 - 1$



7. The table below shows the height y of a dirt bike x seconds after jumping off a ramp. (a) What type of function can you use to model the data? (b) Estimate the height after 1.75 seconds. Solve using any method.

Time in seconds, x	Height in feet, y
0	8
0.5	20
1	24
1.5	20
2	8

