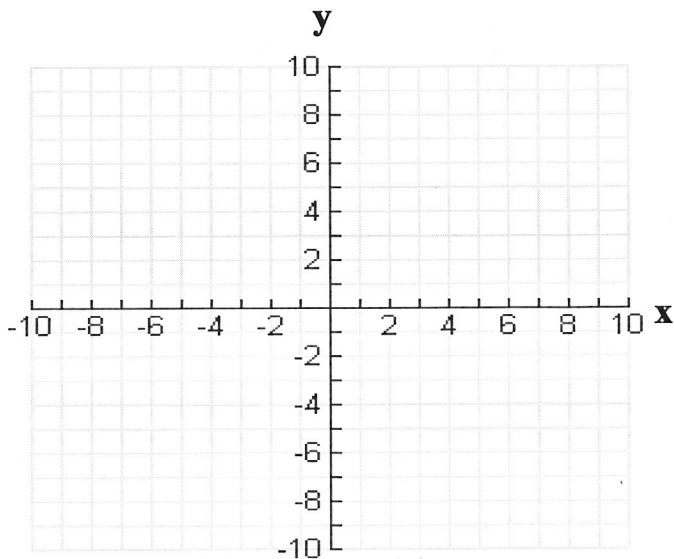


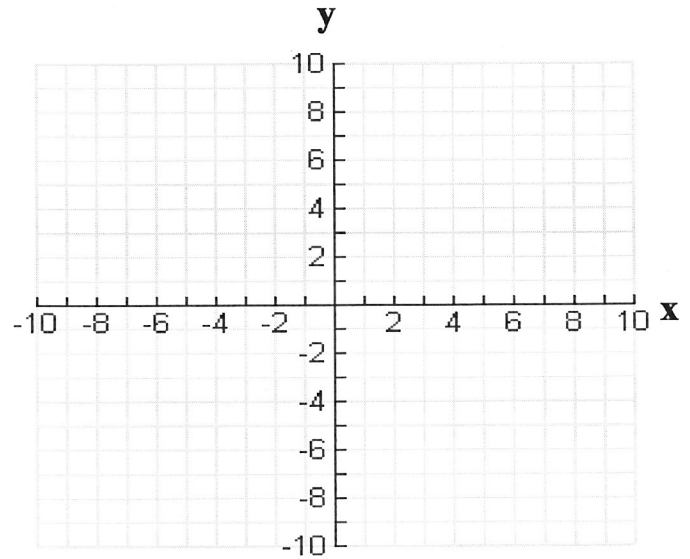
Exam Review: Transformation of Functions

- Describe how it can be determined if a relationship is a function from:
 - Table of values
 - Graph
 - Equation
- Given $f(x) = 2x - 3$ and $g(x) = 4x^2 - 5$, evaluate or expand and simplify the following:
 - $f(5)$
 - $g(x+1)$
 - $3f(x)+7$
 - $f(g(x))$
- Does $f(g(x))$ always equal $g(f(x))$? Explain using an example.
- Given $f(x)$, determine $f^{-1}(x)$:
 - $f(x) = 10x - 7$
 - $f(x) = 3x^2 - 5$
- Graph the functions below using transformations and state the domain and range.

a) $y = 2\sqrt{x-1} - 3$



b) $y = -|2x + 4| + 5$



- Describe the transformations in order for the function $y = -3f(-4x - 8)) + 9$