Math 134 Spring 2018
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Homework Quiz 9   Name: _____

Show all your work and simplify your answers unless otherwise specified. If you do not turn in
a rewrite within a week (or after the fifth attempt), your score will be solidified.

1. Graph $y = x^2$ and then use transformations on this graph to get the graph of the function
   $f(x) = -2(x+2)^2 - 1$.

2. Let $f(x) = \dfrac{\sqrt{x}}{x^2 - 9}$ and $g(x) = x - 3$. Compute $(f \circ g)(x)$ and determine the domain of $f \circ g$.

3. Let $f(x) = 2x^2 + 12x + 16$ and $g(x) = x + 2$. Find $f + g$, $f - g$, fg, and $\frac{f}{g}$. Then determine the domain for each.