

Correct. In a quadratic function, there are no variables in a denominator or radical expressions, so nothing will restrict the domain. This is why the domain is all real numbers. Because the coefficient of x^2 is positive, the graph of the function will open upward. Graph the function to find the vertex, $(2, -4)$. The y -value is the minimum and will determine the range. The range is $f(x) \geq -4$.