Correct. In a quadratic function, there are no variables in a denominator or radical expressions, so nothing will restrict the domain. Therefore, the domain is all real numbers. Because the coefficient of x^2 is negative, the graph of the function will open downward. Graph the function to find the vertex, $(-3, 12)$. The *y*-value is the maximum and will determine the range. The range is $f(x) \leq 12$.