Quiz 3

Show *all* your work. No credit is given without reasonable supporting work. There are *two* sides to this quiz.

1. (§2.8 #39) [4] Let $g(x) = \dfrac{1 + 3x}{5 - 2x}$. Given that g has an inverse, find g^{-1}.

2. [2] (Quad. Wks #11) What are the coordinates of the vertex on the graph of

$$n(x) = 3(x - 1)^2?$$

3. (§2.5 #13) Let $f(x) = 2x^2 + 4x + 3$.

   (a) [1] Does f have an inverse? Why or why not?

   (b) [3] Complete the square to write f in vertex (standard) form.