Readiness Quiz

Show *all* your work algebraically for each and simplify. No credit is given without supporting work. There are *two* sides to this quiz.

1. [4] Simplify the following:

   $-3^2 + 2(4-1)^2)$ $\qquad\qquad\qquad\qquad$ $\dfrac{6x^2 - 6}{9x + 9}$

2. [3] Use algebra to solve for m in
$$\frac{1}{m} = \frac{2}{m} + 5$$

3. [3] Perform the indicated operation and simplify $\dfrac{2}{x+1} - \dfrac{1}{x}$.