Readiness Quiz

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

1. [4] Simplify the following:

$$\frac{2}{3} \cdot \frac{4}{5} - 5^2 \qquad\qquad\qquad \frac{10x - 20}{2x^2 - 8}$$

2. [3] Use algebra to solve for q in

$$-1 + \frac{1}{q+1} = 3$$

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