Algebra II

Name_____

Section 5.6 and 5.9 Quiz Review

Date_____ Period____

Simplify each expression.

1) $\dfrac{4}{2u} + \dfrac{2}{4}$

2) $\dfrac{2}{a-2} - \dfrac{3a}{5a-3}$

3) $\dfrac{v+1}{2(v-2)} - \dfrac{2v}{3}$

4) $\dfrac{1}{x^2 - 5x + 6} + \dfrac{2}{x-3}$

5) $\dfrac{6v}{9v-12} + \dfrac{2v}{9v^2 - 16}$

Solve each equation. Remember to check for extraneous solutions.

6) $\dfrac{2}{x} = 1 + \dfrac{3}{x}$

7) $\dfrac{4}{v} + \dfrac{v + 4}{2v} = 3$

8) $\dfrac{2}{a} + \dfrac{a + 5}{3a^3} = \dfrac{2a + 12}{3a^3}$

9) $\dfrac{1}{a^2 + 11a + 30} - \dfrac{1}{a + 6} = \dfrac{4}{a^2 + 11a + 30}$

10) $\dfrac{1}{x - 5} = 6 - \dfrac{1}{x^2 - 11x + 30}$