Algebra 2 Name_____

4.5 Solving Rational Equations

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{1}{m} + \frac{1}{2m^2} = \frac{3}{2m}$

2) $1 = \frac{n+2}{n} - \frac{n-1}{n}$

3) $\frac{1}{5k+4} + \frac{1}{k-5} = \frac{k-2}{5k^2 - 21k - 20}$

4) $\frac{1}{k^2+3k} = \frac{2}{k^2+3k} + \frac{5}{k}$

5) $\frac{1}{6x} = \frac{x+5}{6x^2} - \frac{x-1}{6x^3}$

6) $\frac{1}{a^2} = \frac{1}{4} + \frac{a-2}{4a^2}$

7) $\frac{1}{x+4} = \frac{2}{x^2+4x} + 1$

8) $1 + \frac{3}{m+3} = \frac{1}{m^2+9m+18}$