Algebra 2 - Task 6.6 Name_____

Solving Rational Equations

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{2x+8}{x^2}+\frac{1}{x^2}=\frac{5x-30}{2x^2}$

2) $\frac{x-2}{x^2}=\frac{1}{x^2}-\frac{1}{x}$

3) $\frac{3}{n+5}=\frac{1}{n+5}-\frac{1}{n-2}$

4) $\frac{1}{3k+5}=\frac{1}{k+5}-\frac{k-1}{3k^2+20k+25}$

5) $\frac{p^2+p-2}{p^2+9p+20}-\frac{p-5}{p+4}=\frac{3}{p+5}$

6) $\frac{1}{x+2}+\frac{x+2}{x}=\frac{2x+8}{x^2+2x}$

Algebra 2 - Task 6.6 Name_____

Solving Rational Equations

Date_____ Period____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{2x+8}{x^2}+\frac{1}{x^2}=\frac{5x-30}{2x^2}$

$\{48\}$

2) $\frac{x-2}{x^2}=\frac{1}{x^2}-\frac{1}{x}$

$\left\{\frac{3}{2}\right\}$

3) $\frac{3}{n+5}=\frac{1}{n+5}-\frac{1}{n-2}$

$\left\{-\frac{1}{3}\right\}$

4) $\frac{1}{3k+5}=\frac{1}{k+5}-\frac{k-1}{3k^2+20k+25}$

$\{-1\}$

5) $\frac{p^2+p-2}{p^2+9p+20}-\frac{p-5}{p+4}=\frac{3}{p+5}$

$\left\{\frac{11}{2}\right\}$

6) $\frac{1}{x+2}+\frac{x+2}{x}=\frac{2x+8}{x^2+2x}$

$\{-4, 1\}$