

## Solving Rational Equations

Block: \_\_\_\_\_

**Solve each equation. Remember to check for extraneous solutions.**

1) 
$$\frac{5}{n} = \frac{2n-6}{n} + \frac{1}{5n}$$

2) 
$$\frac{v-3}{6v^2} + \frac{4}{3v} = \frac{4v+5}{3v^2}$$

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

4) 
$$\frac{1}{x} + \frac{1}{x^2+9x} = \frac{6}{x^2+9x}$$

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

$$6) \frac{5}{x^2 + 15x + 56} = \frac{1}{x^2 + 15x + 56} + \frac{1}{x + 8}$$

$$7) 1 - \frac{1}{b^2 - 4b} = \frac{b - 1}{b^2 - 4b}$$

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