

## Solving Rational Eqns II

Date \_\_\_\_\_ Period \_\_\_\_\_

Solve each equation. Remember to check for extraneous solutions.

1)  $\frac{x+4}{5x} - \frac{1}{5} = \frac{x-3}{5x}$  CD:  $5x$

2)  $\frac{5}{x^2} = \frac{5}{4x^2} - \frac{x-3}{4x^2}$  CD:  $4x^2$

3)  $\frac{m+6}{2m} + \frac{1}{m} = \frac{1}{2m}$  CD:  $2m$

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

5)  $\frac{1}{5k^2} - \frac{k+1}{5k^2} = \frac{3}{k^2}$  CD:  $5k^2$

6)  $\frac{3}{a} + \frac{1}{3} = \frac{1}{a}$  CD:  $3a$

7)  $\frac{1}{5r^2} - \frac{1}{5r} = \frac{1}{r^2}$  CD:  $5r^2$

8)  $\frac{3}{r} = \frac{3}{r^2} - \frac{r+5}{r^2}$  CD:  $r^2$

$$9) \frac{1}{6k} = \frac{1}{3} - \frac{1}{k} \quad \text{CD: } 6k$$

$$10) \frac{1}{2p^2} - \frac{1}{p} = \frac{1}{4p^2} \quad \text{CD: } 4p^2$$

$$11) \frac{1}{2k^2} + \frac{1}{k} = \frac{2}{k^2} \quad \text{CD: } 2k^2$$

$$12) \frac{1}{5n^2} + \frac{n-6}{5n^2} = \frac{1}{n^2} \quad \text{CD: } 5n^2$$

$$13) \frac{1}{4x} = x - \frac{x-1}{4x} \quad \text{CD: } 4x$$

$$14) \frac{n^2+6n+8}{n^2-7n+10} - \frac{n^2-n-56}{n^2-7n+10} = \frac{1}{n-5} \quad \text{CD: } (n-2)(n-5)$$

$n^2-7n+10 = (n-2)(n-5)$

$$15) 1 - \frac{x^2+3x-40}{x^2-8x} = \frac{7x+49}{x^2-8x} \quad \text{CD: } x^2-8x$$

$$16) \frac{1}{2x-6} = \frac{x^2-2x-24}{2x^2-6x} - \frac{1}{x-3} \quad \text{CD: } 2x(x-3)$$

$2x^2-6x = 2x(x-3)$