

Name: _____

Unit 10: Rational Expressions

Date: _____ Per: _____

Homework 8: Rational Equations



**** This is a 2-page document! ****

Directions: Solve each rational equation.

1. $\frac{x-2}{14} = \frac{2}{7}$

2. $\frac{p}{4} = \frac{p+5}{9}$

3. $\frac{5}{k-8} = \frac{2}{k+1}$

4. $\frac{r}{12} = \frac{2}{r-5}$

5. $\frac{4}{y-8} = \frac{y}{y-5}$

6. $\frac{a-3}{2} = \frac{3a-7}{a+3}$

7. $\frac{5}{2n} = \frac{9n}{10}$

8. $\frac{8c+13}{3} = \frac{c-1}{c}$

$$9. \frac{7}{12v} + \frac{1}{6v} = \frac{1}{v-1}$$

$$10. \frac{2}{m+3} - \frac{8}{5m+15} = \frac{m}{10}$$

$$11. \frac{2z}{9} + \frac{1}{3} = \frac{2}{z+4}$$

$$12. \frac{7p}{4p-8} - \frac{p}{p-2} = \frac{p}{p-5}$$

$$13. \frac{2}{r+9} = \frac{r+1}{2r-3} + \frac{9-16r}{4r^2-9}$$

14. If the area of the of the rectangle below is 126 square meters, find the value of x .

