

Algebra I

4.4 Worksheet #2

Solving Equations with Rational Coefficients

NAME: _____

DATE: _____ HOUR: _____

Write the reciprocal of each number.

1. -5 _____

2. $\frac{5}{6}$ _____

3. $-\frac{2}{3}$ _____

4. $6\frac{2}{3}$ _____

5. $\frac{-1}{14}$ _____

6. $\frac{12}{5}$ _____

7. $2\frac{5}{6}$ _____

8. $7\frac{1}{8}$ _____

SOLVE EACH EQUATION BY MULTIPLYING BOTH SIDES BY THE RECIPROCAL OF THE COEFFICIENT. Show your work. Box your answers. Show your check step.

1. $\frac{3}{5}m = 9$

2. $6 = \frac{2}{3}m$

3. $8 = \frac{1}{2}y$

4. $\frac{5}{4}p = 20$

5. $\frac{3}{5}r = \frac{9}{10}$

6. $\frac{5}{4} = \frac{1}{2}x$

7. $\frac{2}{3}p = \frac{8}{9}$

8. $\frac{7}{15} = \frac{1}{3}q$

9. $\frac{2}{3}a = \frac{5}{9}$

RE-WRITE EACH EQUATION USING COEFFICIENTS. Solve each equation by multiplying both sides by the reciprocal of the coefficient. Show your work. Box your answers. Show your check step.

10. $\frac{y}{4} = \frac{3}{8}$

11. $\frac{w}{-5} = 6$

12. $\frac{p}{-12} = -3$

13. $\frac{x}{30} = \frac{3}{2}$

14. $-\frac{r}{7} = 9$

15. $\frac{-x}{5} = \frac{6}{3}$

16. $\frac{p}{-2} = 14$

17. $\frac{z}{-16} = -20$

18. $\frac{-x}{9} = -6$

19. $\frac{-x}{5} = \frac{4}{5}$

20. $\frac{r}{3} = -1.8$

21. $\frac{x}{6} = \frac{2}{3}$