

7th Grade
March 11, 2021

Today we will:

-review yesterday's
WS and finish video
notes

-begin homework



HOMWORK:

Bug Maze--must show
balancing!

ALEKS assignment:
60 min and 5 topics
due Monday by 11:59pm



Chapter 8 Lesson 1 Homework Practice

Solving Equations with Rational Coefficients

Solve each equation.

1. $\frac{7}{8}y = 56$
 $\frac{7}{8} \cdot \frac{8}{7} y = 56 \cdot \frac{8}{7}$
 $y = 64$

2. $\frac{1}{4}w = 12$
 $\frac{1}{4} \cdot 4 w = 12 \cdot 4$
 $w = 48$

3. $-3.5u = -14$
 $\frac{-3.5}{-3.5} u = \frac{-14}{-3.5}$
 $u = 4$

4. $-\frac{1}{5}r = 15$
 $-\frac{1}{5} \cdot (-5) r = 15 \cdot (-5)$
 $r = -75$

5. $9.1d = -7.28$
 $\frac{9.1}{9.1} d = \frac{-7.28}{9.1}$
 $d = -0.8$
 $9.1 \overline{) 7.28}$
 $\underline{18.2}$
 16.0
 $\underline{16.0}$
 0

6. $-\frac{3}{8}f = 0$
 $f = 0$

7. $-\frac{3}{2}n = -13$
 $\frac{-3}{2} \cdot \frac{2}{3} n = -13 \cdot \frac{2}{3}$
 $n = \frac{39}{2}$

8. $\frac{1}{14}v = -7$
 $\frac{1}{14} \cdot 14 v = -7 \cdot 14$
 $v = -98$

9. $-\frac{1}{1.5}b = 24$
 $\frac{-1}{1.5} \cdot (-1.5) b = 24 \cdot (-1.5)$
 $b = -36$

10. $-\frac{2}{1} \cdot \frac{1}{2}h = -72$
 $h = 144$

11. $\frac{24}{1} \cdot \frac{1}{24}r = -5$
 $r = -120$

12. $-\frac{1}{6}p = -3$
 $-\frac{1}{6} \cdot (-6) p = -3 \cdot (-6)$
 $p = 18$

$1.5 \overline{) 24.6}$
 $\underline{30.0}$
 16.0
 $\underline{15.0}$
 1.0
 $\underline{1.5}$
 0

8-2
VIDEONOTES

Two-Step Equations - Balancing

Fill in the boxes to show balancing and solve the equation.
*Remember to use **inverse operations** to work backwards

① $-9x + 1 = -80$
 $\begin{array}{r} \boxed{-1} \quad \boxed{-1} \\ \hline -9x \quad = \quad \boxed{-81} \\ \boxed{-9} \quad \quad \boxed{-9} \\ \hline x \quad = \quad +9 \end{array}$

② $144 = -12x - 60$
 $\begin{array}{r} \boxed{60} \quad \quad \quad \boxed{+60} \\ \hline 204 \quad = \quad -12x \\ \boxed{-12} \quad \quad \boxed{-12} \\ \hline -17 = x \end{array}$

③ $2x + 10 = -2$
 $\begin{array}{r} \boxed{-10} \quad \boxed{-10} \\ \hline 2x \quad = \quad \boxed{-12} \\ \boxed{2} \quad \quad \boxed{2} \\ \hline x \quad = \quad -6 \end{array}$

④ $-6 = \frac{1}{2}x - 10$
 $\begin{array}{r} \boxed{+10} \quad \quad \quad \boxed{+10} \\ \hline \boxed{2} \cdot \boxed{4} = \boxed{?} \cdot \frac{1}{2}x \\ \hline 118 = x \end{array}$

$$\begin{array}{r} \textcircled{5} \quad -15 = -4x + 5 \\ \underline{-5} \qquad \qquad \underline{-5} \\ -20 = -4x \\ \underline{-4} \quad \underline{-4} \\ 5 = x \end{array}$$

$$\begin{array}{r} \textcircled{6} \quad 10 - 6x = -104 \\ \underline{-10} \qquad \qquad \underline{-10} \\ -94 = -6x \\ \underline{-6} \quad \underline{-6} \\ x = 19 \end{array}$$

$$\begin{array}{r} \textcircled{7} \quad -2 = 2 + \frac{x}{4} \\ \underline{-2} \quad \underline{-2} \\ -4 = \frac{x}{4} \\ \underline{4} \cdot \underline{-4} = \underline{4} \cdot \frac{x}{4} \\ -16 = x \end{array}$$

$$\begin{array}{r} \textcircled{8} \quad -9x - 13 = -103 \\ \underline{+13} \quad \underline{+13} \\ -9x = -90 \\ \underline{-9} \qquad \underline{-9} \\ x = 10 \end{array}$$

Note:

For this chapter, you **MUST**
solve **ALL EQUATIONS** by
balancing!



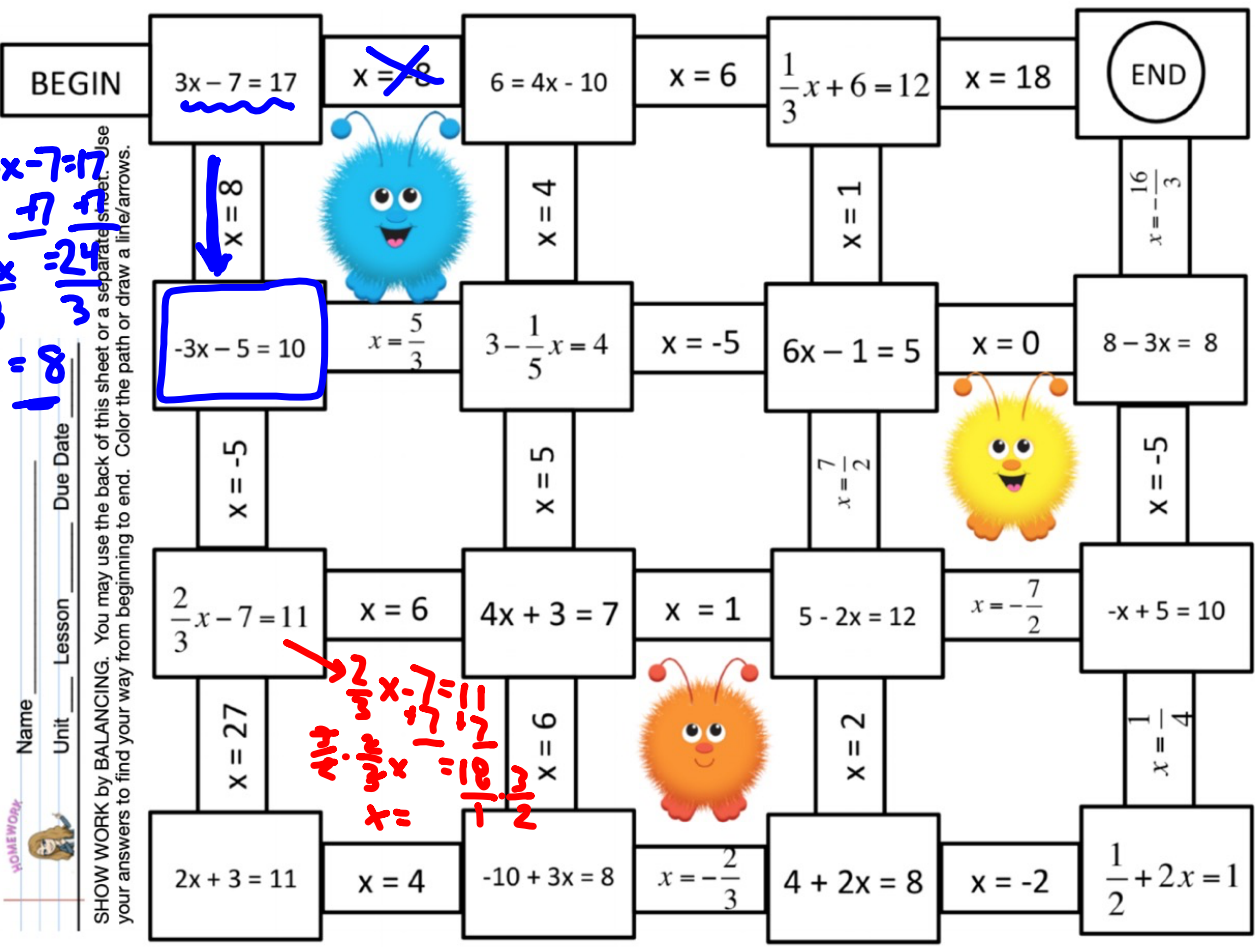
HOMEWORK

Name _____

Unit _____ Lesson _____

Due Date _____

SHOW WORK by BALANCING. You may use the back of this sheet or a separate sheet. Use your answers to find your way from beginning to end. Color the path or draw a line/arrows.



$3x-7=17$
 $3x = 17+7$
 $3x = 24$
 $x = 24/3$
 $x = 8$

$2x+3=11$
 $2x = 11-3$
 $2x = 8$
 $x = 8/2$
 $x = 4$

$4x+3=7$
 $4x = 7-3$
 $4x = 4$
 $x = 4/4$
 $x = 1$

$x = 5/3$

