

TWO-STEP EQUATIONS

Cornell Notes
& Maze Activity!

Name: _____		Class: _____
Topic: _____		Date: _____
Main Ideas/Questions	One-Step Equations	Notes
	Fractions	
	Two-Step Equations	

To Solve a Two-Step Equation:
1. Undo the Addition/Subtraction (or
2. Undo the Multiplication/Division

Start!

4x + 10 = -26

$\frac{x}{3} + 10 = 15$

9 - 2x = 35

$\frac{2}{3}x + 15 = 17$

$\frac{x}{7} - 4 = -2$

$\frac{1}{2}x + 13 = 9$

$\frac{3}{4}x - 9 = 27$

-5x - 10 = 10

$8 - \frac{1}{3}x = 16$

-12x - 17 = -69

18 - 4x = -2

$19 - \frac{5}{2}x = 34$

28 - 32x = 92

5 - x = 12

$13 - \frac{3}{2}x = 37$

END!



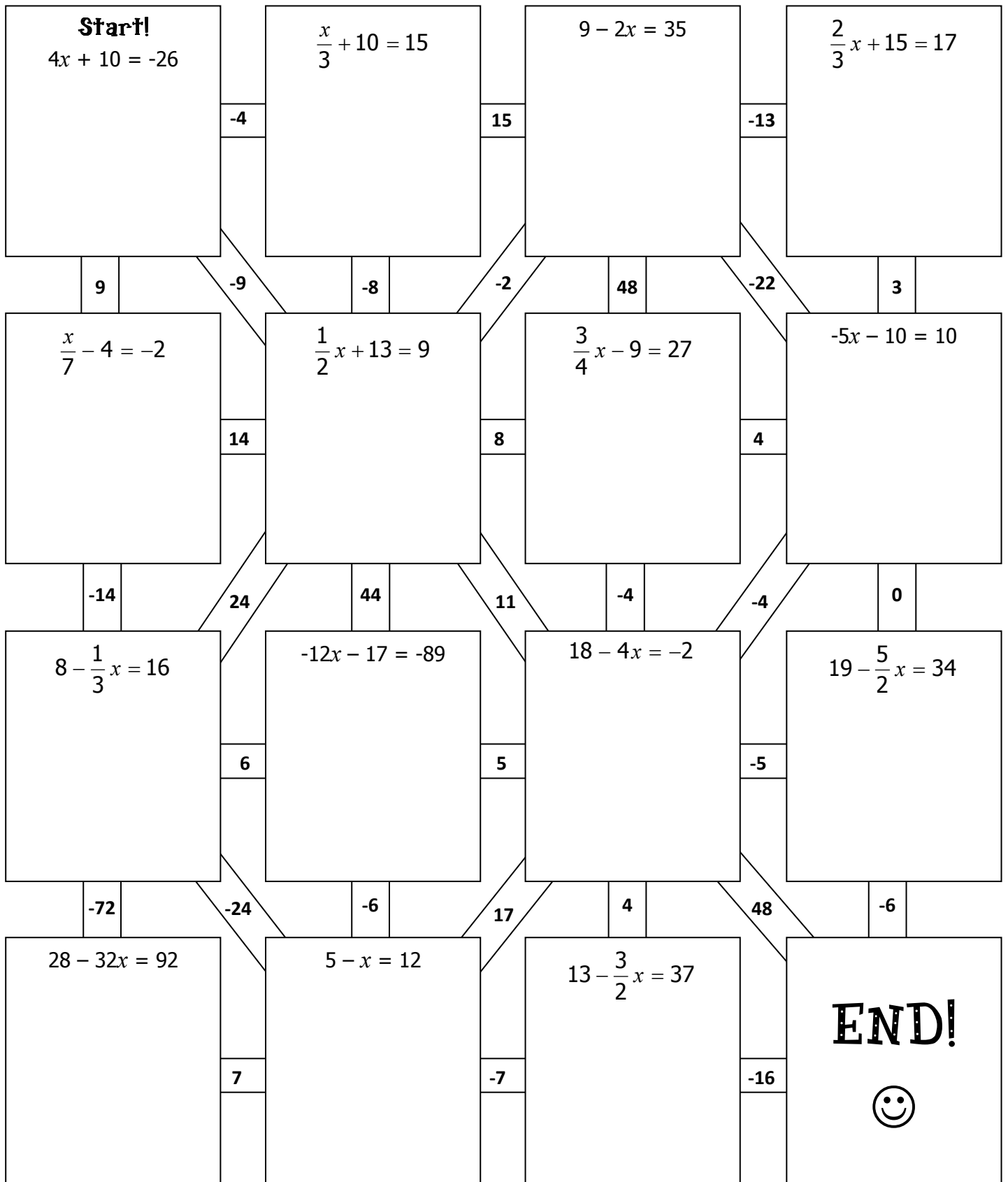
Name:	Class:
-------	--------

Topic:	Date:
--------	-------

Main Ideas/Questions	Notes	
One-Step Equations	1. $m + 12 = 10$	2. $-2 = g - 9$
	3. $-7y = -91$	4. $\frac{a}{9} = -4$
Fractions *To "get rid" of a fraction, multiply by the _____!	5. $\frac{2}{3}x = 10$	6. $\frac{4}{9}w = -8$
	7. $-\frac{6}{5}k = 12$	8. $-\frac{1}{2}m = -9$
Two-Step Equations	To Solve a Two-Step Equation: 1. Undo the Addition/Subtraction (to remove constant term) 2. Undo the Multiplication/Division (to remove coefficient)	
	9. $6x + 8 = 50$	10. $2x - 5 = 11$
	11. $13 = -4x + 9$	12. $7 - 3x = 34$
	13. $\frac{x}{2} - 7 = 9$	14. $11 = \frac{x}{-5} + 8$
	15. $\frac{3}{5}x + 22 = 28$	16. $-\frac{1}{3}x + 1 = -7$

two-step eQuATion MAze!

Directions: Use your solutions to navigate through the puzzle. **SHOW ALL STEPS!!!!**



Name:

Key

Class:

Topic:

Date:

Main Ideas/Questions

Notes

One-Step
Equations

1. $m + 12 = 10$

$$\begin{array}{r} -12 \quad -12 \\ \hline m = -2 \end{array}$$

2. $-2 = g - 9$

$$\begin{array}{r} +9 \quad +9 \\ \hline 7 = 9 \end{array}$$

3. $-7y = -91$

$$\begin{array}{r} -7 \quad -7 \\ \hline y = 13 \end{array}$$

4. $\frac{a}{9} = -4(9)$

$$\begin{array}{r} a = -36 \end{array}$$

Fractions

*To "get rid"
of a fraction,
multiply by the
reciprocal!

5. $\frac{2}{3}x = 10 \left(\frac{3}{2}\right)$

$$\begin{array}{r} x = 15 \end{array}$$

6. $\frac{4}{9}w = -8 \left(\frac{9}{4}\right)$

$$\begin{array}{r} w = -18 \end{array}$$

7. $-\frac{6}{5}k = 12 \left(-\frac{5}{6}\right)$

$$\begin{array}{r} k = -10 \end{array}$$

8. $-\frac{1}{2}m = -9 \left(-\frac{2}{1}\right)$

$$\begin{array}{r} m = 18 \end{array}$$

Two-Step
Equations

To Solve a Two-Step Equation:

1. Undo the **Addition/Subtraction** (to remove constant term)
2. Undo the **Multiplication/Division** (to remove coefficient)

9. $6x + 8 = 50$

$$\begin{array}{r} -8 \quad -8 \\ \hline 6x = 42 \\ \hline \frac{6x}{6} = \frac{42}{6} \\ x = 7 \end{array}$$

10. $2x + 5 = 11$

$$\begin{array}{r} -5 \quad -5 \\ \hline 2x = 6 \\ \hline \frac{2x}{2} = \frac{6}{2} \\ x = 3 \end{array}$$

11. $13 = -4x + 9$

$$\begin{array}{r} -9 \quad -9 \\ \hline 4 = -4x \\ \hline -4 \quad -4 \\ \hline -1 = x \end{array}$$

12. $7 - 3x = 34$

$$\begin{array}{r} -7 \quad -7 \\ \hline -3x = 27 \\ \hline -3 \quad -3 \\ \hline x = -9 \end{array}$$

13. $\frac{x}{2} + 7 = 9$

$$\begin{array}{r} +7 \quad +7 \\ \hline \frac{x}{2} = 2 \\ \hline (-2) \frac{x}{2} = (-2) 2 \\ x = -4 \end{array}$$

14. $11 = \frac{x}{-5} + 8$

$$\begin{array}{r} -8 \quad -8 \\ \hline \frac{x}{-5} = 3 \\ \hline (-5) \frac{x}{-5} = (-5) 3 \\ x = -15 \end{array}$$

15. $\frac{3}{5}x + 22 = 28$

$$\begin{array}{r} -22 \quad -22 \\ \hline \frac{3}{5}x = 6 \\ \hline \left(\frac{5}{3}\right) \frac{3}{5}x = \left(\frac{5}{3}\right) 6 \\ x = 10 \end{array}$$

16. $-\frac{1}{3}x + 1 = -7$

$$\begin{array}{r} -1 \quad -1 \\ \hline -\frac{1}{3}x = -8 \\ \hline \left(-\frac{3}{1}\right) \left(-\frac{1}{3}\right)x = \left(-\frac{3}{1}\right) (-8) \\ x = 24 \end{array}$$

Two-step eQuATion MAZE!

Directions: Use your solutions to navigate through the puzzle. SHOW ALL STEPS!!!!

<p>Start!</p> $4x + 10 = -26$ $\begin{array}{r} -10 \quad -10 \\ \hline 4x = -36 \\ \hline 4 \quad 4 \\ \hline x = -9 \end{array}$	$\frac{x}{3} + 10 = 15$ $\begin{array}{r} -10 \quad -10 \\ \hline \frac{x}{3} = 5 \end{array}$ $\frac{3}{3}x = 5 \left(\frac{3}{3}\right)$ $x = 15$	$9 - 2x = 35$ $\begin{array}{r} -9 \quad -9 \\ \hline -2x = 26 \\ \hline -2 \quad -2 \\ \hline x = -13 \end{array}$	$\frac{2}{3}x + 15 = 17$ $\begin{array}{r} -15 \quad -15 \\ \hline \frac{2}{3}x = 2 \end{array}$ $\frac{3}{3} \cdot \frac{2}{3}x = 2 \left(\frac{3}{3}\right)$ $x = 3$
9	-4	15	-13
-9	-8	-2	48
$\frac{x}{7} - 4 = -2$	$\frac{1}{2}x + 13 = 9$ $\begin{array}{r} -13 \quad -13 \\ \hline \frac{1}{2}x = -4 \end{array}$ $\frac{2}{2} \cdot \frac{1}{2}x = -4 \left(\frac{2}{2}\right)$ $x = -8$	$\frac{3}{4}x - 9 = 27$	$-5x - 10 = 10$ $\begin{array}{r} +10 \quad +10 \\ \hline -5x = 20 \\ \hline -5 \quad -5 \\ \hline x = -4 \end{array}$
14	8	4	3
-14	24	44	11
$8 - \frac{1}{3}x = 16$ $\begin{array}{r} -8 \quad -8 \\ \hline -\frac{1}{3}x = 8 \end{array}$ $\left(-\frac{3}{3}\right) \cdot \frac{1}{3}x = 8 \left(-\frac{3}{3}\right)$ $x = -24$	$-12x - 17 = -89$ $\begin{array}{r} +17 \quad +17 \\ \hline -12x = -72 \\ \hline -12 \quad -12 \\ \hline x = 6 \end{array}$	$18 - 4x = -2$ $\begin{array}{r} -18 \quad -18 \\ \hline -4x = -20 \\ \hline -4 \quad -4 \\ \hline x = 5 \end{array}$	$19 - \frac{5}{2}x = 34$
6	5	-5	0
-72	-24	-6	11
$28 - 32x = 92$	$5 - x = 12$ $\begin{array}{r} -5 \quad -5 \\ \hline -x = 7 \\ \hline -1 \quad -1 \\ \hline x = -7 \end{array}$	$13 - \frac{3}{2}x = 37$ $\begin{array}{r} -13 \quad -13 \\ \hline -\frac{3}{2}x = 24 \end{array}$ $\frac{2}{3} \cdot \frac{3}{2}x = 24 \left(\frac{2}{3}\right)$ $x = -16$	<p style="text-align: center;">END!</p> <p style="text-align: center;">😊 ✓</p>
7	-7	-16	

THANK YOU
for downloading this product!



Please stop back at my store and let me know how it went!
<http://www.teacherspayteachers.com/Store/All-Things-Algebra>

STAY CONNECTED!

Blog: <http://allthingsalgebra.blogspot.com>

Pinterest: <http://pinterest.com/ginaw83/all-things-algebra/>

Facebook: <http://www.facebook.com/AllThingsAlgebra>

Email: allthingsalgebra@gmail.com

CREDITS:

Fonts provided by KevinandAmanda.com

Frames provided by [The Enlightened Elephant](http://TheEnlightenedElephant.com)



© 2013 Gina Wilson, "All Things Algebra"

Products by Gina Wilson (All Things Algebra) may be used by the purchaser for their classroom use only. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted without the written permission of the author. This includes posting this product on the internet in any form, including classroom/personal websites or network drives. If you wish to share this product with your team or colleagues, you may purchase additional licenses from my store at a discounted price!