

Warm Up back of p 13

$$\begin{array}{r|l} 2x - 3 = 11 & \\ +3 & +3 \\ \hline \cancel{2x} & 14 \\ \cancel{2} & 2 \\ \hline x = 7 & \end{array}$$

$$2(7) - 3 = 11$$

$$\begin{array}{r|l} \frac{x}{4} + 5 = 21 & \\ -5 & -5 \\ \hline \cancel{\left(\frac{x}{4}\right)} & (16)4 \\ \hline x = 64 & \end{array}$$

Topic:		Date:	
Main Ideas/Questions	Notes		
One-Step Equations	1. $m + 12 = 10$ -2	2. $-2 = g - 9$ 7	
	3. $-7y = -91$ 13	4. $\frac{a}{9} = -4$ -36	
Fractions *To "get rid" of a fraction, multiply by the <i>inverse (reciprocal)</i>	5. $\frac{3}{2}(\frac{2}{3}x = 10)$ $\frac{3}{2}$ $x = 15$	6. $\frac{9}{4}(\frac{4}{9}w = -8)$ $\frac{9}{4}$ $w = -18$	
	7. $-\frac{6}{5}k = 12$	8. $-\frac{1}{2}m = -9$	
Two-Step Equations	<i>To Solve a Two-Step Equation:</i> 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. $\frac{3}{5}x + 22 = 28$ -22 -22 <hr/> $\frac{3}{5}x = 6$ $x = 10$	16. $-\frac{1}{3}x + 1 = -7$	

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$$\begin{array}{r}
 5^2 + \frac{14 + (6 \cdot 3)}{8} - 7 + 3 \\
 5 \cdot 5 \\
 25 + \frac{14 + 18}{8} - 7 + 3 \\
 25 + \frac{32}{8} - 7 + 3 \\
 25 + 4 - 7 + 3 \\
 29 - 7 + 3 \\
 22 + 3 = \textcircled{25}
 \end{array}$$

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$$(14 + 6) - 15 + 4 \cdot 2^3 + 16$$

$$20 - 15 + 32 + 16$$

$$5 + 32$$
$$37 + 16 = 53$$

$$3[(18 - 6) + 2(4)]$$

Handwritten work in blue ink:

A blue curly brace is drawn under the expression $(18 - 6) + 2(4)$. Below the brace, the expression $[12 + 8]$ is written in blue ink. A blue arrow points from the left side of the brace down to the expression $3[20]$. Below $3[20]$, the number 60 is written in blue ink.

Try these on your own:

$$-\frac{9}{3} + \sqrt{25} + |-2|$$

$$|4 + 6| + \frac{-8}{2} + \sqrt{4}$$

$$\frac{7^2 + 2}{-3}$$

$$(-1 \cdot 5) + 3^2 \div -1$$

p.16

Translate and solve:

Nine less than twice a number is thirty-one

$$\begin{array}{r} 2n - 9 = 31 \\ \hline + 9 \\ \hline 2n = 40 \end{array} \quad \frac{2n}{2} = \frac{40}{2} \quad n = 20$$

The quotient of a number and four decreased by ten is two

$$\begin{array}{r} \frac{n}{4} - 10 = 2 \\ \hline \phantom{\frac{n}{4}} + 10 \\ \hline 4\left(\frac{n}{4}\right) = (12)4 \\ n = 48 \end{array}$$

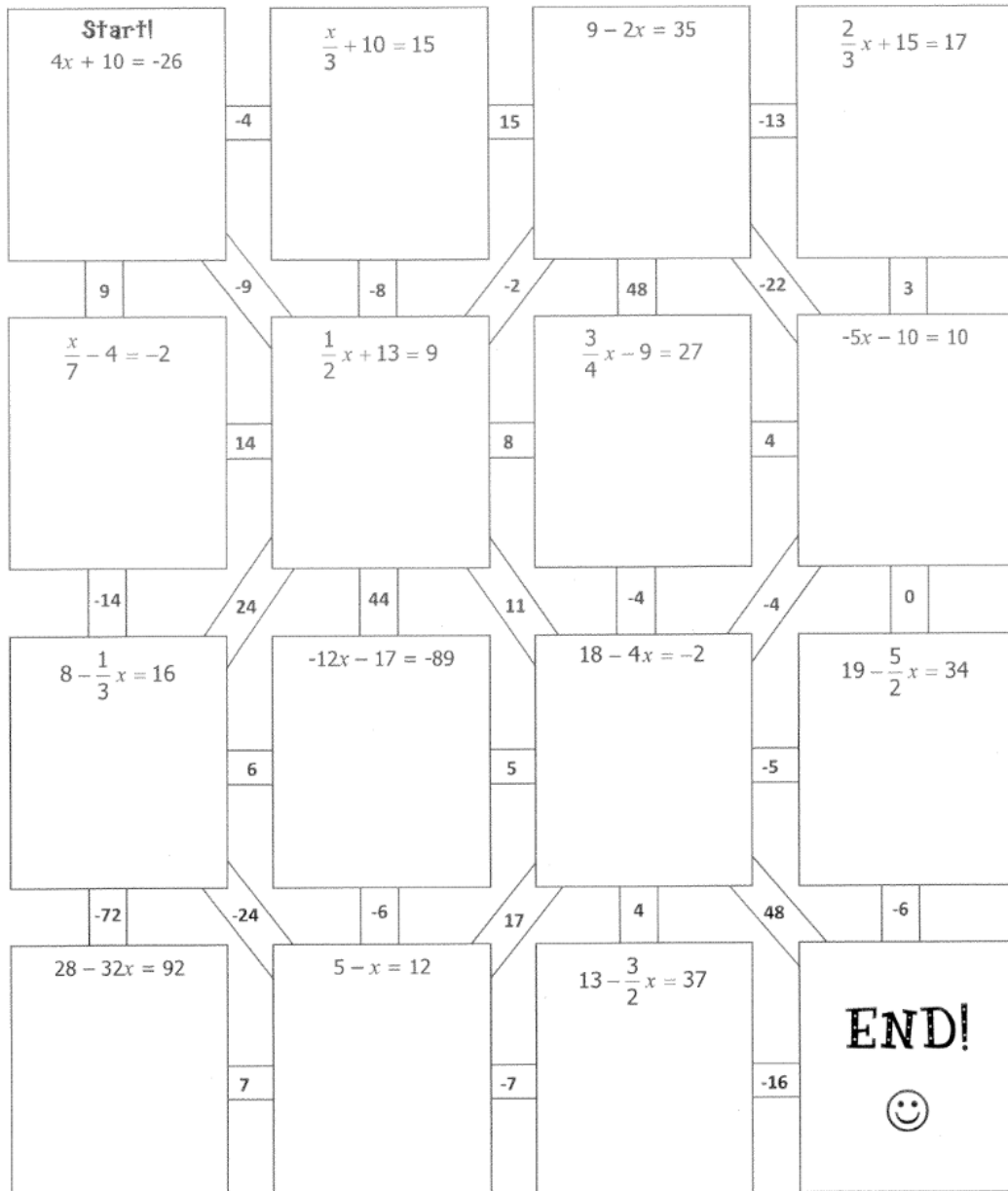
QR Code Activity P. 16

- ~ one person is in charge of scanning
- ~ as a group/pairs translate and solve each two step equation
- ~ when your group completes a card one person scans to check the answer
- ~ pass the card to the next group and repeat

two-step eQuATion MAZE!

homework

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



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homework

Advanced Math

Name _____

Assignment

Date _____

Solve each equation.

1) $10 + \frac{b}{8} = 8$

2) $-8 + \frac{a}{4} = -9$

3) $-m + 1 = -17$

4) $-5 + \frac{x}{6} = -6$

5) $7 + \frac{n}{2} = 16$

6) $8 + \frac{a}{8} = 6$

7) $-7 + \frac{x}{5} = -11$

8) $\frac{x}{4} + 8 = 7$

9) $5n + 6 = -54$

10) $-2 - 4r = -46$

11) $7 + 4x = 3$

12) $2 + \frac{p}{3} = 7$

13) $9 + \frac{n}{9} = 10$

14) $-6 - 4v = 18$

15) $6 + 2m = 20$

16) $4 + 4n = 40$

17) $-5n + 1 = -14$

18) $\frac{p}{2} - 2 = 7$

19) $-2 + 7a = -79$

20) $-7n + 1 = -125$

Why Did the Chicken Cross the Road?



TO GET TO THE OTHER SIDE, of course. But do you know the answers to THESE two questions?

1. What do you call a chicken crossing the road?

8 lb 10 h -11 -80 8 h -65 12 37 lb 4 -36 7 lb 18 10 h 8 h 4 10 h -36

2. Why did the turkey cross the road?

8 h 10 h 39 9 lb -65 10 h -7 6 -33 -45 6 11 h 32 -96 -30 -36 8 h 15 41 lb -45 4 41 lb 20 6 -36

Solve the equation or problem. Find your solution in the code. Each time it appears, write the exercise letter above it.

E. $5 + 4n = 29$

U. $-8 - 3y = 25$

S. $19 + \frac{x}{2} = 4$

R. $-\frac{1}{5}d - 1 = 12$

M. $90 = 10p - 90$

Y. $-11 = 61 - 6q$

H. $-17 - \frac{u}{3} = -2$

A. $-8 = 4 + \frac{1}{8}b$

I. $-64 = -15m - 4$

V. $12 - 9w = 75$

L. $-13 - \frac{1}{4}h = 7$

W. $\frac{a}{-16} + 101 = 99$

K. Jo is thinking of a number. Four less than 9 times the number is 176. Find Jo's number.

N. Mo is thinking of a number. Eleven more than one third of the number is -1. Find Mo's number.

P. A table and 8 chairs together weigh 97 lb. If the table weighs 25 lb, how much does each chair weigh?

C. Three desks and a bookcase together weigh 157 lb. The bookcase weighs 34 lb. How much does each desk weigh?

T. Mr. Piper's plumbing needed repairs. The plumber charged \$98 for parts plus \$45 per hour for labor. If the bill totaled \$458, how many hours of labor were required?

O. Oshgosh would like to buy a new pair of skates for \$115. So far he has saved \$40. If he earns \$7.50 per hour, how many hours must he work until he can buy the skates?

