

Warm Up back of p 9

copy each problem and show work to solve for x

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

$$\begin{array}{r}
 x + 13 = 7 \\
 - 13 \quad - 13 \\
 \hline
 \boxed{x = -6} \\
 \checkmark -6 + 13 = 7
 \end{array}$$

$$\begin{array}{r}
 3x = 18 \\
 \underline{\quad} \quad \underline{\quad} \\
 \quad 3 \\
 \hline
 x = 6 \\
 \checkmark 3(6) = 18 \\
 \checkmark \frac{45}{5} = 9
 \end{array}$$

Name:	Date:
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Topic:	Class:
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Main Ideas/Questions	Notes/Examples	
ONE-STEP EQUATIONS	Steps to Solve:	
	①	Locate the variable.
	②	Determine the operation tied to the variable.
	③	Use inverse operations on both sides of the equal sign to solve.
	④	Check your solution!
INVERSE OPERATIONS	Inverse operations can be used to solve equations:	
	<div style="border: 1px solid black; width: 150px; height: 25px; margin: 5px;"></div> <div style="text-align: center; margin: 5px;">↔</div> <div style="border: 1px solid black; width: 150px; height: 25px; margin: 5px;"></div>	<div style="border: 1px solid black; width: 150px; height: 25px; margin: 5px;"></div> <div style="text-align: center; margin: 5px;">↔</div> <div style="border: 1px solid black; width: 150px; height: 25px; margin: 5px;"></div>
SET 1: Addition & Subtraction	Directions: Solve each equation. Check all solutions.	
	1. $x + 7 = -1$	2. $m - 11 = -9$
	3. $9 = 14 + h$	4. $-15 + w = 14$
	5. $-21 = k - 8$	6. $-1 = -4 + v$
SET 2: Multiplication & Division	Directions: Solve each equation. Check all solutions.	
	7. $4a = -24$	8. $-56 = -7p$

	9. $\frac{n}{5} = 9$	10. $2 = \frac{r}{-8}$
	11. $-k = 7$	12. $\frac{x}{-6} = -12$
SET 3: Mixed Practice	Directions: Solve each equation. Check all solutions.	
	13. $x - 11 = -3$	14. $-10d = 40$
	15. $a + 15 = 2$	16. $24 = -3 + h$
	17. $-4 = \frac{m}{-3}$	18. $9 = -\frac{1}{7}y$ $9 = \frac{-1y}{-7}$ $-9 = y$
	19. $\frac{-47}{w} = -10$ $\frac{+47}{w} = \frac{+47}{37}$ $w = 37$	20. $\frac{p}{9} = -9$
	21. $-48 = -16a$	22. $k \frac{9}{9} = -38$ $k = -38$
	23. $-20 = \frac{v}{-4}$	24. $6n = 0$

After reviewing odd together, complete the even numbered problems and turn in for a classwork grade

Name: _____

Unit 2: Algebraic Expressions

Date: _____ Per: _____

Homework 1: Translating Expressions

Directions: Translate each expression.	
1. "the <u>product</u> of a number and negative 8" $n \cdot -8, -8n$	2. "a number increased by thirty-five"
3. "two-fifths <u>of</u> a number" $\frac{2}{5}n$	4. "the <u>quotient</u> of a number and 4"
5. "18 <u>less than</u> a number" $n - 18$	6. "24 hours per day"
7. "the <u>total</u> for parking and an admission ticket" $p + a$	8. "\$3 subtracted from the cost of book"
9. "the <u>sum</u> of <u>twice</u> a number and 15" $2n + 15$	10. "the <u>difference</u> of a number squared and 6"
11. "half of a number <u>decreased</u> by 27" $\frac{1}{2}n - 27$	12. "10 more than a number divided by -8"
13. "9 less than the <u>square root</u> of a number" $\sqrt{n} - 9$	14. "-4 times a number plus 29"
15. "25 <u>decreased</u> by the <u>product</u> of number and 3" $25 - 3n$	16. "7 points more than twice the number of points scored by the other team"

Directions: Give two different ways to write each expression in words.	
17. $\frac{x}{-7}$	a) _____ b) _____
18. $-4n$	a) _____ b) _____
19. $\frac{k}{3} + 16$	a) _____ b) _____
20. $2a - 18$	a) _____ b) _____

IXL Lessons 6th grade

Z.4 model equations

Z.6 solve one step equations

Z.8 one step equation word problems

After reaching a smart score of 90 on each lesson, pick up the one step homework and begin

If you finish all of the above, there is a 2-step equation video posted in Google Classroom that you can view to prepare for next class

One Step Equations

Name _____

Homework

Date _____

Solve each equation.

1) $\frac{x}{2} = -10$

2) $-15 = \frac{v}{20}$

3) $p - 5 = 4$

4) $2x = -14$

5) $n + 6 = 10$

6) $-78 = 6m$

7) $2 = a - 1$

8) $7 = x - 3$

9) $24 = r + 6$

10) $-56 = 8m$

11) $p - 15 = -7$

12) $-8 = \frac{a}{12}$

13) $-6 = 6n$

14) $b - 16 = -26$

15) $14x = 210$

16) $-31 = n - 17$

17) $-12b = -36$

18) $\frac{n}{4} = 7$

19) $x - 12 = -28$

20) $12 = \frac{b}{8}$