Name_____

Using the Distributive Property

Date_____ Period____

Simplify each expression.

1) $-6(a + 8)$

$-6a - 48$

2) $4(1 + 9x)$

$4 + 36x$

3) $6(-5n + 7)$

$-30n + 42$

4) $(9m + 10) \cdot 2$

$18m + 20$

5) $(-4 - 3n) \cdot -8$

$32 + 24n$

6) $8(-b - 4)$

$-8b - 32$

7) $(1 - 7n) \cdot 5$

$5 - 35n$

8) $-6(x + 4)$

$-6x - 24$

9) $5(3m - 6)$

$15m - 30$

10) $(-6p + 7) \cdot -4$

$24p - 28$

11) $5(b - 1)$

$5b - 5$

12) $(x + 9) \cdot 5$

$5x + 45$

Solving Equations Review
Find and Fix the Mistakes

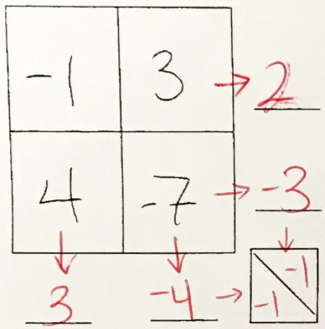
Problem and Incorrect Solution	Explanation of Errors Made (some have more than one mistake)	Correct Solution (show all work)
$-2(8m + 8) = -16$ $-16m + 16 = -16$ $-16 \quad -16$ $\frac{-16m}{16} = \frac{-32}{16}$ $m = -2$	• -2(8) = -16 • Did not divide both sides by -16	m = 0
$5(1 + 4h) + 2h = 27$ $5 + 20h + 2h = 27$ $27h = 27$ $\frac{27}{27} \quad \frac{27}{27}$ $h = 1$	Combined unlike terms	h = 1 (still get same answer!)
$-2(x - 8) + 4x = -12$ $-2x - 16 + 4x = -12$ $-2x - 16 + 4x = -12$ $-2x - 16 = -12$ $+16 \quad +16$ $\frac{-2x}{2} = \frac{4}{2}$ $x = 2$	• -2(-8) = +16 • -2x + 4x = +2x • Did not divide by -2	x = -14

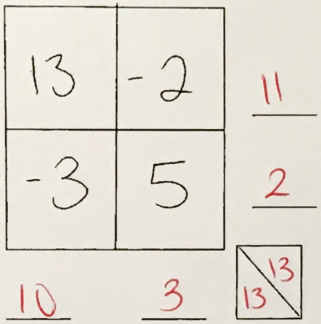
Let's Practice Solving Integers!

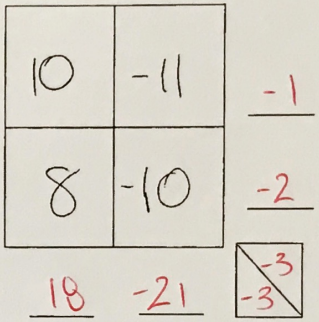
Practice, Practice, Practice

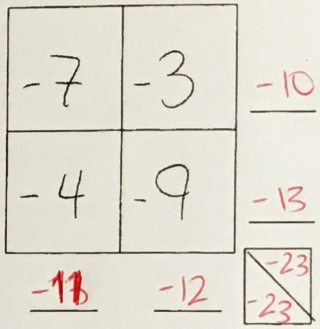
Name _____

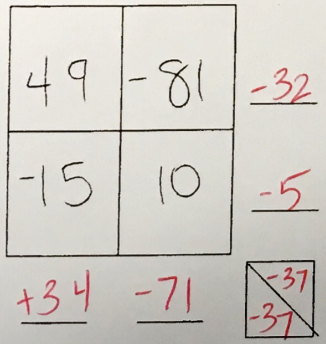
Period _____

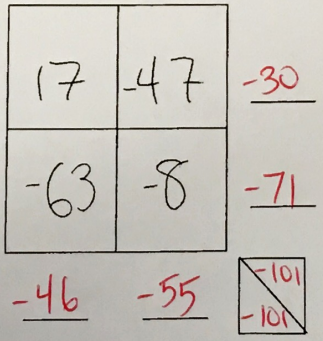


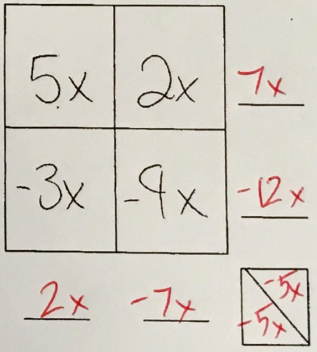


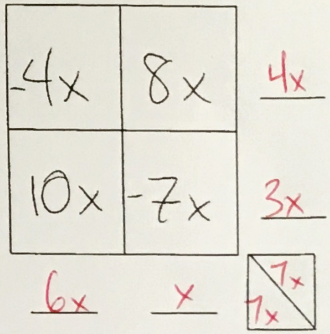












Name:_____ Per:_____

Solving Equations

Directions: Please **show all your work** by showing all your steps.

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1. $8 \cdot \frac{v}{8} = 2 \cdot 8$

$v = 16$

Describe what you did after each step

Given

multiply both sides by 8

Solve

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2. $5a + 11 = 12$

$-11 \quad -11$

$\frac{5a}{5} = \frac{1}{5}$

$a = \frac{1}{5}$

Given

subtract 11

divide 5

Solve

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3. $-2(6p - 7) = 4 - 9p$

$-12p + 14 = 4 - 9p$

$+9p \qquad +9p$

$-3p + 14 = 4$

$-14 \quad -14$

$\frac{-3p}{-3} = \frac{-10}{-3}$

$p = \frac{10}{3}$ or $3\frac{1}{3}$

Given

Distribute -2

Add 9p

Subtract 14

Divide -3

Solve

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5. $\frac{1}{2}(26 - 14y) + 2y = -4(8 + y) - 10 + 4y$

$13 - 7y + 2y = -32 - 4y - 10 + 4y$

$13 - 5y = -42 + 0y$

$-13 \qquad -13$

$\frac{-5y}{-5} = \frac{-55}{-5}$

$y = 11$

Given

Distribute $\frac{1}{2}$ and -4

Combine Like Terms

Subtract 13

Divide -5

Solve