

Name _____ Class _____ Date _____

Unit 1 Problem Set B

Lessons 1-5 through 1-9

Do you know HOW?

1. Is the ordered pair $(-3, 2)$ a solution to the equation $5x + 2y = -11$? Show your work.

2. Is the ordered pair $(-2, 7)$ a solution to the equation $18 - 4x = -2x - 12$? Show your work.

3. Is the ordered pair $(-1, 7)$ a solution to the equation $7x + y = y - 7$? Show your work.

Evaluate each expression for $m = 3$ and $n = -2$.

4. $2n + 6$

5. $-3m - n$

6. $(mn)^2$

Simplify each expression.

7. $6f^2g - 10f^2g$

8. $-5 - 8$

9. $2.5 - (-4.2)$

10. $-(-7y + 12)$

11. $\frac{2}{3}[9n - (-15)]$

12. $(-a + 100)\frac{1}{5}$

Do you UNDERSTAND?

13. **Reasoning** Are $12x^2y^3z$ and $-45zy^3x^2$ like terms? Explain.

14. **Writing** Describe the process for adding two numbers with different signs.
SHOW $47 + (-73)$ using “bags” and “split bags” of integer counters.

15. **Reasoning** Is the following statement true or false? If the sum of three numbers is negative, then all three numbers are negative. If false, give a counterexample.