

Name: _____

Date: _____ Per: _____

Lesson 4.1.1 Homework

4-16. Draw a diagram that could be represented by each of the following number expressions. Then circle the terms and calculate the value of each expression.

a. $4 + 2(5) + (-3)$

b. $4 + 2(5 + (-3))$

4-17. While Mrs. Poppington was visiting the historic battleground at Gettysburg, she talked with the landscapers who were replacing the sod in a park near the visitor center. The part of the lawn being replaced is shown in the diagram at right. Measurements are in yards. The diagram is not drawn to scale, but all corners are right angles.

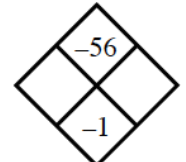
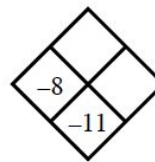
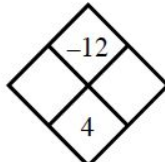
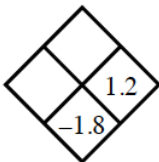


- a. Use your ruler to make a scale drawing of the lawn that is being replaced. Let $\frac{1}{4}$ inch equal 1 yard.
- b. How many square yards of sod will be needed?
- c. At \$2.43 a square yard, how much will the sod cost?
- d. The area will be surrounded by a temporary fence which costs \$0.25 per linear foot. How many feet will be needed, and how much will it cost?
- e. What will be the total cost of materials for the sod and fencing?

4-18. Troy has a number cube with the numbers 1 through 6 on it. Assuming each side is equally likely to appear when he rolls the cube, find the following probabilities. Note: When two or more numbers are multiplied, each of the numbers is a factor of the product.

- a. $P(\text{rolls a 2})$
- b. $P(\text{rolls an odd number})$
- c. $P(\text{rolls a factor of 6})$

4-19. Complete each of the Diamond Problems below.



4-20. Simplify each expression below.

a. $(4.76)(12.5)$

b. $45.6 + 23.68$

c. $48 - 12.62$

d. $10(0.034)$

e. $368.9 - 234.78$

f. $13.6 + 23.05 + 0.781$