

Pre-Algebra Problem Set 1

Assigned Friday 9/6, due Friday 9/13

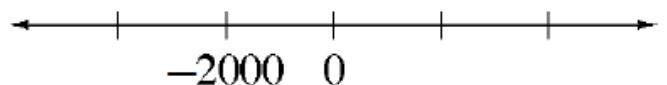
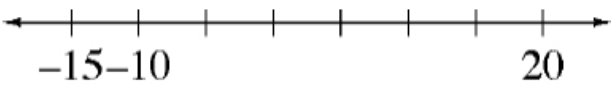
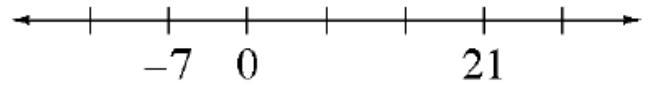
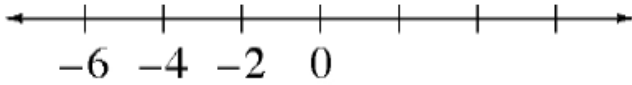
NO Work Shown, NO Credit Given

Name _____

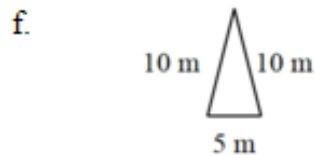
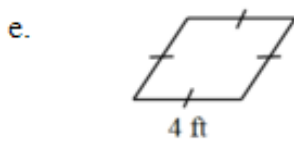
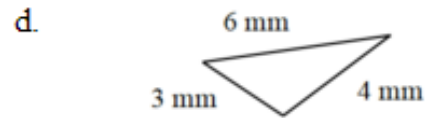
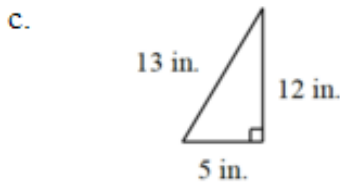
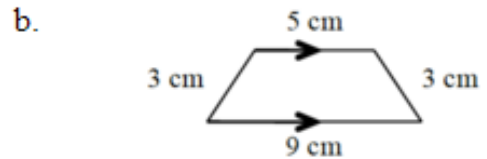
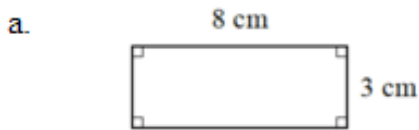
Period _____

Problems #1-4 can be completed on this paper.

1. Fill in the missing numbers on each number line.



2. Find the perimeter of each figure below. The markings on part (b) mean that the lines are parallel. The markings on part (e) show that all sides are the same length.



3. For each shape drawn in problem #2, choose one of the labels below that best describes that shape. Be as specific as you can. Look up the definitions on your iPad for more information if you do not remember what one of the words describes.

right triangle

scalene triangle

obtuse triangle

isosceles triangle

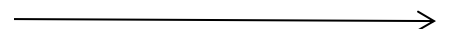
rhombus

rectangle

square

trapezoid

hexagon



4. The value of a decimal becomes clearer when the place value is spoken or written as the number it names. For example, 0.1 makes more sense if it is read as “one tenth” rather than “zero point one.”

a. Write the following numbers in words so that the place value can be identified:

0.4

1.3

0.56

2.008

b. Now reverse your thinking. Write the decimals that go with the following words:

Three hundredths forty-two thousandths five and two tenths

Please show your work for #5-10 on a separate piece of paper, and staple to this homework.

5. Find the mean for each set of data below.

a) Jan’s quiz scores: 82, 64, 73, 91, 85 b) The number of cats your friends have: 0, 1, 3, 2

c) The number of minutes Pam talked on the phone: 35, 40, 12, 16, 25, 10

6. Maria was playing a game with her brother. She said, “*I’m thinking of a number. When you multiply my number by six and add seven, you get twenty-five. What is my number?*”

a. Find Maria’s number. b. Explain how you figured out your answer.

7. Julio is an architect who designs skyscrapers. Assume that each story (also called a “floor” or “layer”) of a new building is 15 feet high as you help Julio answer the following questions.

a. How high would a two-story building be? What about a 10-story building? What about a 30-story building?

b. If Julio had to design the building to be 750 feet tall, how many stories should the building have?

8. Janice’s mother gave her a ten dollar bill to buy five pounds each of bananas and apples at the grocery store. When she got there, she found that bananas were 80¢ per pound and apples were \$1.40 per pound.

Did Janice’s mother give her enough money? If so, should she receive any change? If not, how much more money does she need? Show all of your work.

9. At the farmers’ market, two pounds of peaches cost \$4.20. How much will five pounds cost? Show your work, or explain your reasoning.

10. a. Show your work: $4158 \div 7$. Use multiplication to check your answer.

b. Show your work: $7084 \div 23$. Use multiplication to check your answer.