

SAMPLE PROBLEMS

65. Write the correct label to complete each equation.

- a. 32 ounces \div 16 ounces per pound = 2 _____
- b. 5¢ per minute \times 17 _____ = 85¢
- c. 7 tenths of a mile $-$ 4 tenths of a mile = 3 _____
- d. 6 _____ \times 12 fluid ounces per bottle = 72 fluid ounces
- e. 20 quarts \div 4 _____ = 5 gallons
- f. 3 eighths of a pizza $+$ 4 eighths of a pizza = 7 _____

52. Mrs. Jackson bought 6 Super Supreme Pizzas for her daughter's slumber party. Each pizza was cut into 8 equal slices. All but 5 slices were eaten.

- a. Each slice was what fraction of a pizza?
- b. How many slices were eaten?
- c. How many pizzas were eaten? (Write your answer as a fraction and as a mixed number.)
- d. What fraction, of all the pizza that Mrs. Jackson bought, was eaten?

81. A strip of rubber insulation tape is $4\frac{3}{4}$ meters long.

- a. How many centimeters long is the strip of tape? (Hint: How many centimeters are in 1 meter? How many centimeters are in $\frac{1}{4}$ of a meter?)
- b. How many 17-centimeter pieces can be cut from the strip of tape?

84. Use the sheet of square centimeter grid paper that your teacher gives you to draw a map of an imaginary Parish. Follow these instructions:

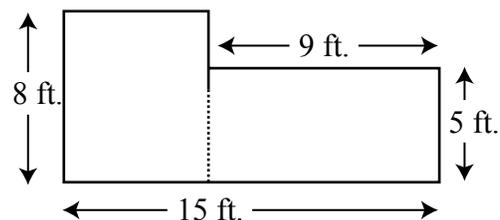
- Draw a compass in the upper right-hand corner of the grid to show North, South, East, and West.
- Use this scale for your map: Each centimeter on the map will represent 1 mile in the Parish.
- The Parish is 12 miles wide from East to West and 18 miles long from North to South. Draw an outline of the Parish on the grid.
- What is the area of the Parish?
- There is a park in the center of the Parish. It is a rectangle which is 4 miles wide from East to West, and 6 miles long from North to South. Draw the park on your map.
- If Mike rides his bike once around the rim of the park, how far will he ride?
- If Mike rides at a steady speed of 5 miles-per-hour, how long will it take him to go around the park?

115. The letters P, A, T, R, I, C, I, A are printed on 8 separate cards. One of the cards is selected at random.

- Does each card have the same chance as any other card of being chosen?
- Does each letter have the same chance as any other letter of being chosen?
- Which is more likely to be chosen, a vowel or a consonant?
- What is the probability that T will be selected?
- What is the probability that A will be selected?

133. The floor of these two rooms are to be covered with tiles which are each one square foot.

- How many tiles will be needed?
- What is the combined area of the two rooms?



138. 1, 3, 7, 15, 31, 63, . . .

- If this pattern is continued, what will be the next number in the list?
- Explain what must be “done” to each number in order to get the next number.

97. There are 900 students at JFK High School. ZX-95 calculators cost \$40 each.

- How much money will be needed to buy a ZX-95 for each student?
- AP-2000 calculators cost \$59 each, with a discount of \$1 per calculator for each 100 purchased. (For example, if a school buys 100 AP-2000s, they pay only \$58 for each of them.) How much will 900 AP-2000s cost?
- Do you think the AP-2000 Company should set a limit on this discount? Explain.

115. Jordyn and Derek were playing a game in which they could win or lose points. Points won were recorded as whole numbers, and points lost were recorded as the opposites of whole numbers, using the negative or minus sign.

This chart shows points won or lost for the two players during the game.

Turn	1 st	2 nd	3 rd	4 th	5 th	6 th	Final Score
Jordyn	-7	4	10	-6	8	-2	
Derek	9	3	-8	-5	7	-10	

- Find the final scores for Jordyn and Derek.
- Who won the game?
- What was the difference in points between the winning and losing scores?
- What operation did you perform to find the answer to part c.?