Ratios and Proportions
Worksheet 2

Choice *E*, in multiple-choice questions, is always: *I request help from the teacher*.

You may mark E in addition to one other choice if you think that you have the right answer to the question but you do not feel that you have a complete understanding of the problem.

Your teacher will decide whether to use the two-point or four-point scoring rubric for problems that use numbers, pictures, or words to justify/explain your answer(s). You may request help for these questions, too. Write the word "teacher" by your answer(s).

1. A chocolate chip cookie recipe calls for calls 2 cups of flour to make 40 cookies. Pythagleo needs to make 100 cookies. Which proportion can Pythagleo use to find the number of cups of flour he needs to make 100 cookies?

   A. $\frac{2}{40}=\frac{n}{100}$ B. $\frac{40}{100}=\frac{n}{2}$ C. $\frac{40}{2}=\frac{n}{100}$ D. $\frac{2}{n}=\frac{n}{40}$ E. Teacher

2. Students at Western High School in Enigma voted for a mascot for their school: either a new Thor, the Norwegian Elkhound, the mascot of the abandoned Etna High, or Ziggy, the Norse Thunder Bolt. The principal announced that Ziggy won over Thor by a 4 to 3 vote. Which of the following could have been the votes?

   A. Ziggy: 195, Thor: 260
   B. Ziggy: 390, Thor: 325
   C. Ziggy: 260, Thor: 195
   D. Ziggy: 300, Thor: 400
   E. Teacher

3. Carter's dog, Munch, is given 9 dog treats during every two-week period. How many dog treats will Munch get over the course of 10 weeks?

   A. 19 treats B. 23 treats C. 45 treats D. 90 treats E. Teacher

4. Chris and Carter made a model of the mysterious containment room to try to better understand how the room could have been used to contain people back in 1966. The actual room measured 30 feet by 27 feet. The model is 20 inches by 18 inches. What is the scale of the model room to the actual room?

   A. 1 : 3 B. 1 : 12 C. 1 : 18 D. 1 : 36 E. Teacher

5. Chris would like to buy an iPod but the one she wants costs $294. Chris's friend Harper has one like the model Chris wants. Harper decides to sell his current iPod to Chris and use the money to help pay for an even more expensive model. Harper tells Chris he will sell her his current iPod for 15% off the original price. It's only five months old and is in very good condition. Which proportion can be used to find the final price (p) Chris will pay Harper if she buys his iPod?

   A. $\frac{85}{100}=\frac{p}{294}$ B. $\frac{p}{0.15}=294$ C. $\frac{294}{p}=\frac{85}{100}$ D. $\frac{294}{p}=\frac{15}{100}$ E. Teacher



6. Pythagleo loves to eat mashed potatoes. He found a 5 pound bag of instant mashed potatoes that would serve 64 people. How many ounces should Pythagleo use if if he only wants to make two servings?

   A. 2 ozs. B. 2.5 ozs. C. 4 ozs. D. 6 ozs. E. Teacher

7. If you need two pounds of bologna for six sub sandwiches, then how much bologna will you need to make eight sub sandwiches?

   A. $2\frac{1}{2}$ lbs. B. $2\frac{2}{3}$ lbs. C. 3 lbs. D. $3\frac{1}{3}$ lbs. E. Teacher

8. Carter wants all 30 people in his mathematics class to have three pieces of pizza. If each pizza has eight slices, how many pizzas should he order?

   A. 10 B. 11 C. 12 D. 13 E. Teacher

9. Pythagleo was making lemonade. One can of frozen lemonade concentrate will make 64 fluid ounces. Each can of concentrate requires $6\frac{3}{4}$ cups of water. Pythagleo planed to use three cans of frozen concentrate. How many cups of water will he need?

   A. $27\frac{3}{4}$ cups B. 27 cups C. $20\frac{2}{3}$ cups D. $20\frac{1}{4}$ cups E. Teacher

10. Emily is helping to make decorations for Pythagleo's reunion party. She wants two hanging streamers for every 10 square feet of ceiling. If the cafeteria is a rectangle 100 by 60 ft., how many streamers must Emily make?

    A. 1,200 B. 120 C. 100 D. 60 E. Teacher

11. What is the ratio of a right angle to a straight angle?

    A. $\frac{1}{1}$ B. $\frac{1}{4}$ C. $\frac{1}{3}$ D. $\frac{1}{2}$ E. Teacher