TOPIC 1: Using Ratios – Block 10 Homework

1. You have a recipe for coconut cookies. The recipe makes 20 cookies. You need 100 cookies for a bake sale. Increase the recipe proportionally to make 100 cookies.

| Makes 20 cookies | Makes 100 cookies |
|--------------------------------|-------------------|
| 2 egg whites | |
| $\frac{1}{2}$ teaspoon vanilla | |
| $\frac{2}{3}$ cup sugar | |
| $\frac{1}{4}$ teaspoon salt | |
| $1\frac{1}{3}$ cups coconut | |

2. The ratio of the number of boys to the number of girls at your school is 5 to 8. Which statements are accurate according to this ratio? **Circle yes or no next to each possible answer.**

| If a class has 16 girls it is reasonable to expect there are 10 boys in the same class. | Yes | No |
|--|-----|----|
| In a group of 52 students about 20 are boys. | Yes | No |
| The ratio of girls to total students is 8 to 13. | Yes | No |
| The Algebra class has 24 girls and 16 boys. This is the same ratio as girls to boys in the school. | Yes | No |
| If there are 208 students in the school it is reasonable to expect there are 128 girls. | Yes | No |

3. Evy is making salsa for a large party. Her salsa recipe calls for 2 cups of diced tomatoes, 1 cup of diced onion, and $\frac{1}{4}$ cup of cilantro. She plans to make 13 cups of salsa. Which of the following statements are true? Circle true or false for each statement.

| The recipe normally makes 4 cups of salsa. | True | False |
|---|------|-------|
| The recipe normally makes 3.25 cups of salsa. | True | False |
| To make 13 cups of salsa, Evy should increase the recipe by a scale factor of 4. | True | False |
| To make 13 cups of salsa, Evy should increase the recipe by a scale factor of 3.25. | True | False |
| To make 13 cups of salsa, Evy will need 1 cup of cilantro. | True | False |

4. Randall is a computer technician at a large corporation. He estimates that 10,400 emails are sent by the employees in a work day (8 hours). The rate of sending emails is roughly the same throughout the day. How many emails are sent in a half hour?

5. At Ferndale High School, 11 out of 20 high school seniors have a part-time job. This ratio is the same at Blaine High School, which has 480 seniors. How many seniors at Blaine High School have a part-time job?