

**TOPIC 1: Using Ratios – Block 11 Classwork → Homework (if not finished in class)**

1. Ming wants to make cookies for her neighbors. The recipe she found only makes 12 cookies, but she wants to make more. She can scale the recipe she found to make a larger amount of cookies. Here is Ming’s recipe:

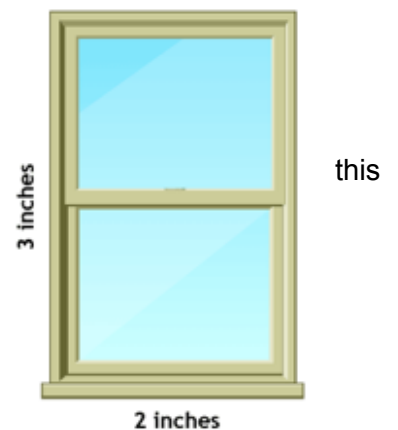
**Chocolate Chip Cookies** (makes 12 cookies)

- $\frac{1}{2}$  cup of butter
- $\frac{3}{4}$  cup of brown sugar
- 1 egg
- 1 cup of flour
- 1 cup of chocolate chips

Which of the following statements are **true**? Circle true or false for each statement.

If she wants to make 18 cookies, she will need $1\frac{1}{2}$ cups of flour.	True   False
If she wants to make 24 cookies, she needs to multiply the amounts of each ingredient by $\frac{1}{2}$ .	True   False
If she wants to make 24 cookies, she needs to multiple the amounts of each ingredient by 2.	True   False
If she wants to make 32 cookies, she will need $\frac{3}{4}$ cup of butter.	True   False

2. This is a scaled drawing of a window. The window is actually 34 inches wide and 51 inches tall. What scale factor was used to **reduce** the dimensions of the actual window to the dimensions of scaled drawing?



3. In a model of our solar system, 1 centimeter represents approximately 194 kilometers. The model of the planet Mars has a diameter of 35 centimeters. Use this information to complete the following statement:

Since this model is to scale, the actual diameter of Mars is approximately \_\_\_\_\_ kilometers.

4. On a map, the distance from Abilene, Texas, to Midland, Texas, is 10 cm. The scale shows that 4 cm on the map equals 50 actual miles. What is the distance from Abilene to Midland in actual miles?

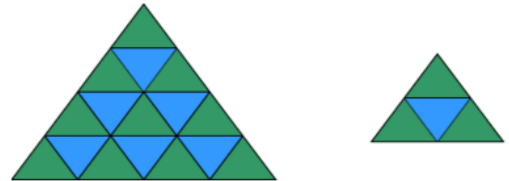


5. You and two friends are cooking breakfast. You love blueberry pancakes and you find a recipe that serves nine people. Rewrite the recipe to feed just the three of you.

Nine people	Three people
3 eggs	
$2\frac{2}{5}$ cups milk	
$3\frac{2}{3}$ cups flour	
$1\frac{1}{5}$ cups blueberries	
2 tablespoons sugar	

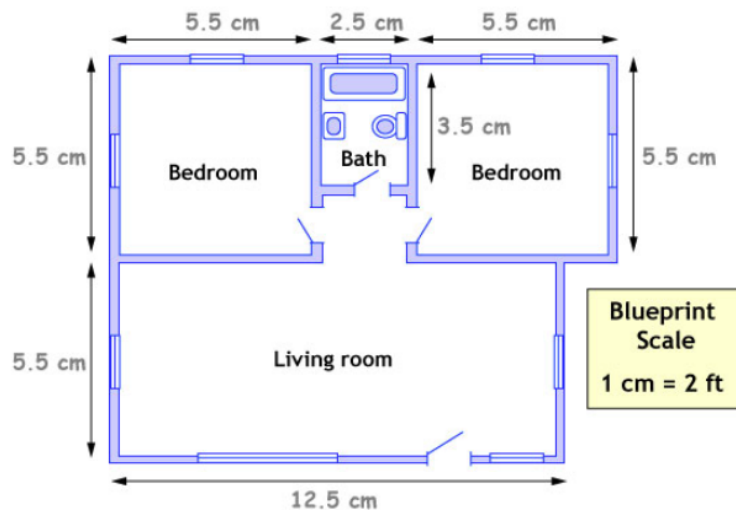
6. Dia is making an apple-cranberry fruit drink. The recipe calls for 7 parts of apple juice and 4 parts cranberry juice. Dia puts 12 cups of cranberry juice into a pitcher. How much apple juice does she need to mix in the pitcher?

7. These two figures are made of the same stacked triangles.



What scale factor is needed to **reduce** the side lengths of the larger figure to the side lengths of the smaller figure?

8. The blueprint shown has a scale of 1 cm on the blueprint to 2.5 ft in the actual building. Using this scale, which of the following statements are true about the actual building? Circle yes or no for each statement.



Each actual bedroom is 13.75 ft by 13.75 ft	Yes	No
Each actual bedroom has an area of about 76 square feet.	Yes	No
The total area of the house is about 894 square feet.	Yes	No
The actual living room has an area of about 430 square feet.	Yes	No
The actual bathroom is 6.25 ft by 13.75.	Yes	No

