

# EMORY / BINGHAMTON

## Ratio and Proportion Homework

Name: \_\_\_\_\_

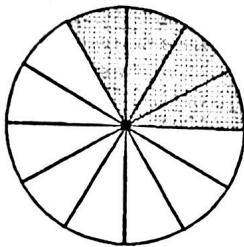
Date: \_\_\_\_\_

1. A scale drawing of New York State, 2.5 centimeters represents 10 kilometers. How many kilometers are represented by 10 centimeters?
2. In a class there are 11 boys and 14 girls. What is the ratio of the number of girls in the class to the number of pupils in the class?  
A.  $\frac{11}{14}$                       B.  $\frac{14}{11}$                       C.  $\frac{14}{25}$                       D.  $\frac{25}{14}$
3. A 50-milliliter salt solution contains 4 milliliters of salt. How many milliliters of salt will a 75-milliliter solution of the same strength contain?
4. Two numbers are in the ratio 3:2. If the smaller number is 24, find the larger number.
5. A machine can manufacture 1800 pencils in 30 minutes. At this same rate, how many minutes will it take to manufacture 3000 pencils?
6. In 3 hours a car traveled 180 kilometers. At the same average rate, how many kilometers can the car travel in 5 hours.

7. If 10 cubic centimeters of blood contains 1.2 grams of hemoglobin, how many grams of hemoglobin would 35 cubic centimeters of the same blood contain?

8. An astronaut weighs 174 pounds on Earth and 29 pounds on the Moon, If his daughter weighs 108 pounds on Earth, what is the daughter's weight on the Moon, in pounds?

9. The accompanying circle represents the 2400 students at Central High School, and the shaded portion represents the freshman class. What is the total number of students in the freshman class?



10. If 8 ounces of a sports drink contains 110 milligrams of sodium, what is the total number of milligrams of sodium in 20 ounces of the sports drink?

11. During a recent winter, the ratio of deer to foxes was 7 to 3 in one county of New York State. If there were 210 foxes in the county, what was the number of deer in the county?

A. 90

B. 147

C. 280

D. 490

12. On a map, 1 centimeter represents 40 kilometers. How many kilometers are represented by 8 centimeters?

A. 5

B. 48

C. 280

D. 320

13. A cake recipe calls for 1.5 cups of milk and 3 cups of flour. Seth made a mistake and used 5 cups of flour. How many cups of milk should he use to keep the proportions correct?

A. 1.75

B. 2

C. 2.25

D. 2.5

14. If a machine that prints designs on T-shirts prints 500 shirts in 3 hours, how many hours will it take to print designs on 1,800 shirts?

A. 6

B. 9.8

C. 10.8

D. 12