

Name: _____

Ratios and Proportions

SHOW ALL WORK!!!

1. The male to female ratio in China is 56 to 44. Write this ratio as a fraction in simplest form.

2. When a coach asked her team members what they wanted for dinner, 13 members wanted pizza while 5 wanted hamburgers. Identify two different ratios that could be made from this information. Explain each.

3. A bowl contains green, red and white marbles in the ratio 6:3:2. Based on this information, what does the ratio 5:11 represent?

4. Kareem can type 320 words in 5 minutes. He has applied for a job that requires typing 72 words per minute. Does Kareem meet this requirement? *Explain your answer using mathematics.*

5. Find the missing term of the proportion $\frac{4}{5} = \frac{q}{65}$.

6. Solve: $\frac{9}{20} = \frac{n}{30}$.

7. Write a *proportion* to describe the following: the school store sells 6 pencils for \$0.99. At this rate, how much would 16 pencils cost? *Solve* your proportion.
8. The serving size for a chocolate cake contains 280 calories. If there are 12 servings in one cake, how many calories are there in an entire cake? Use mathematics to support your answer.
9. An engineer is drawing plans for a new water tower. The tower is 84 feet tall and has a diameter of 28 ft. If the scale ratio is 1 in: $3\frac{1}{2}$ ft, what are the dimensions of the *model*? Use proportions to solve.
10. Becky picked \$0.22 out of a bag filled with \$2.00 worth of coins. Express the amount she picked as a percent of the total amount.
11. Which of the following equals the decimal 0.42?
- a.) 42% b.) $\frac{4.2}{100}$ c.) $\frac{42}{10}$ d.) 4.2%