

Math 6 - Unit 2: Ratios, Rates, Proportions

Ratio and Rate Problems with Proportions

Name: _____

Class Period: 1 2 3 4 Date: _____

<p>1. SCHOOL The ratio of boys to girls in history class is 4 to 5. How many girls are in the class if there are 12 boys in the class?</p>	<p>2. FACTORIES A factory produces 6 motorcycles in 9 hours. Find how many hours it takes to produce 16 motorcycles at this rate.</p>
<p>3. READING Alejandro read 4 pages in a book in 6 minutes. How long would you expect him to take to read 6 pages at this rate?</p>	<p>4. BAKING A recipe that will make 3 pies calls for 7 cups of flour. Find how many pies can be made with 28 cups of flour.</p>
<p>5. TYPING Sara can type 90 words in 4 minutes. About how many words would you expect her to type in 10 minutes at this rate?</p>	<p>6. BASKETBALL The Lakewood Wildcats won 5 of their first 7 games this year. There are 28 games in the season. About how many games would you expect the Wildcats to win this season?</p>
<p>7. FOOD Two slices of Dan's Famous Pizza have 230 Calories. How many Calories would you expect to be in 5 slices of the same pizza?</p>	<p>8. SHOPPING Grant paid \$12 for 4 baseball card packs. How many baseball card packs can he purchase for \$21?</p>

Math 6 - Unit 2: Ratios, Rates, Proportions

Solving Proportions Puzzle

Name: _____

Class Period: 1 2 3 4 Date: _____

Ada

Did you know that a woman wrote the first description of a computer programming language? She was the daughter of a famous English lord and was born in 1815. She had a deep understanding of mathematics and was fascinated by calculating machines. Her interests led her to create the first algorithm. In 1843, she translated a French version of a lecture by Charles Babbage. In her notes to the translation, she outlined the fundamental concepts of computer programming. She died in 1852. In 1979, the U.S. Department of Defense named the computer language *Ada* after her.

To find out this woman's full name, find the value of each letter below.



$$1. \frac{7}{A} = \frac{28}{40}$$

$$2. \frac{5}{4} = \frac{B}{36}$$

$$3. \frac{1}{3} = \frac{C}{15}$$

$$4. \frac{5}{D} = \frac{35}{63}$$

$$5. \frac{2}{5} = \frac{E}{20}$$

$$6. \frac{2}{18} = \frac{L}{27}$$

$$7. \frac{6}{N} = \frac{12}{14}$$

$$8. \frac{9}{11} = \frac{O}{44}$$

$$9. \frac{2}{8} = \frac{R}{4}$$

$$10. \frac{5}{V} = \frac{25}{30}$$

$$11. \frac{7}{4} = \frac{Y}{28}$$

Now look for the values of the letters below. Write the corresponding letter on the line above the solution. If you have calculated correctly, the letters will spell her name.

$\overline{10}$ $\overline{9}$ $\overline{10}$ $\overline{45}$ $\overline{49}$ $\overline{1}$ $\overline{36}$ $\overline{7}$

$\overline{3}$ $\overline{36}$ $\overline{6}$ $\overline{8}$ $\overline{3}$ $\overline{10}$ $\overline{5}$ $\overline{8}$

Math 6 - Unit 2: Ratios, Rates, Proportions

Ratio and Rate Problems with Proportions

ANSWER KEY

Name: _____

Class Period: 1 2 3 4 Date: _____

<p>1. SCHOOL The ratio of boys to girls in history class is 4 to 5. How many girls are in the class if there are 12 boys in the class?</p> <p style="text-align: center;">15 girls</p>	<p>2. FACTORIES A factory produces 6 motorcycles in 9 hours. Find how many hours it takes to produce 16 motorcycles at this rate.</p> <p style="text-align: center;">24 hours</p>
<p>3. READING Alejandro read 4 pages in a book in 6 minutes. How long would you expect him to take to read 6 pages at this rate?</p> <p style="text-align: center;">9 minutes</p>	<p>4. BAKING A recipe that will make 3 pies calls for 7 cups of flour. Find how many pies can be made with 28 cups of flour.</p> <p style="text-align: center;">12 pies</p>
<p>5. TYPING Sara can type 90 words in 4 minutes. About how many words would you expect her to type in 10 minutes at this rate?</p> <p style="text-align: center;">225 words</p>	<p>6. BASKETBALL The Lakewood Wildcats won 5 of their first 7 games this year. There are 28 games in the season. About how many games would you expect the Wildcats to win this season?</p> <p style="text-align: center;">20 games</p>
<p>7. FOOD Two slices of Dan's Famous Pizza have 230 Calories. How many Calories would you expect to be in 5 slices of the same pizza?</p> <p style="text-align: center;">575 calories</p>	<p>8. SHOPPING Grant paid \$12 for 4 baseball card packs. How many baseball card packs can he purchase for \$21?</p> <p style="text-align: center;">7 packs</p>

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Name: _____

Solving Proportions Puzzle

ANSWER KEY

Class Period: 1 2 3 4 Date: _____

Ada

Did you know that a woman wrote the first description of a computer programming language? She was the daughter of a famous English lord and was born in 1815. She had a deep understanding of mathematics and was fascinated by calculating machines. Her interests led her to create the first algorithm. In 1843, she translated a French version of a lecture by Charles Babbage. In her notes to the translation, she outlined the fundamental concepts of computer programming. She died in 1852. In 1979, the U.S. Department of Defense named the computer language *Ada* after her.

To find out this woman's full name, find the value of each letter below.



$$1. \frac{7}{A} = \frac{28}{40} \quad \mathbf{10}$$

$$2. \frac{5}{4} = \frac{B}{36} \quad \mathbf{45}$$

$$3. \frac{1}{3} = \frac{C}{15} \quad \mathbf{5}$$

$$4. \frac{5}{D} = \frac{35}{63} \quad \mathbf{9}$$

$$5. \frac{2}{5} = \frac{E}{20} \quad \mathbf{8}$$

$$6. \frac{2}{18} = \frac{L}{27} \quad \mathbf{3}$$

$$7. \frac{6}{N} = \frac{12}{14} \quad \mathbf{7}$$

$$8. \frac{9}{11} = \frac{O}{44} \quad \mathbf{36}$$

$$9. \frac{2}{8} = \frac{R}{4} \quad \mathbf{1}$$

$$10. \frac{5}{V} = \frac{25}{30} \quad \mathbf{6}$$

$$11. \frac{7}{4} = \frac{Y}{28} \quad \mathbf{49}$$

Now look for the values of the letters below. Write the corresponding letter on the line above the solution. If you have calculated correctly, the letters will spell her name.

$\overline{10}$ $\overline{9}$ $\overline{10}$ $\overline{45}$ $\overline{49}$ $\overline{1}$ $\overline{36}$ $\overline{7}$

$\overline{3}$ $\overline{36}$ $\overline{6}$ $\overline{8}$ $\overline{3}$ $\overline{10}$ $\overline{5}$ $\overline{8}$