Math 6 - Unit 2: Ratios, Rates, Proportions

Class Period: 1 2 3 4 Date: _____

Check to see if each set of ratios form a proportion. If it does form a proportion, color in the box. If it does not form a proportion, leave it blank. If your answers are correct, the colored boxes should reveal an image.

5		15	
- 4	=	12	

$$\frac{2}{6} = \frac{11}{8}$$

$$\frac{6}{9} = \frac{48}{52}$$

$$\frac{6}{4} = \frac{24}{16}$$

$$\frac{6}{12} = \frac{1}{2}$$

$$\frac{13}{10} = \frac{26}{18}$$

$$\frac{1}{10} = \frac{8}{80}$$

$$\frac{5}{7} = \frac{20}{30}$$

$$\frac{27}{36} = \frac{3}{4}$$

$$\frac{5}{9} = \frac{20}{36}$$

$$\frac{12}{8} = \frac{24}{22}$$

$$\frac{1}{2} = \frac{2}{3}$$

$$\frac{4}{3} = \frac{12}{9}$$

$$\frac{19}{14} = \frac{8}{7}$$

$$\frac{5}{3} = \frac{25}{15}$$

$$\frac{3}{10} = \frac{10}{3}$$

$$\frac{35}{25} = \frac{7}{5}$$

$$\frac{7}{11} = \frac{28}{33}$$

$$\frac{4}{7} = \frac{24}{46}$$

$$\frac{18}{27} = \frac{4}{6}$$

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.
$$\frac{9}{11} = \frac{0}{44}$$

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.

10

9

10

45

49

36

1

5

7

3

36

6

8

3

-

10

8

Math 6 - Unit 2: Ratios, Rates, Proportions Name:

Do the Ratios Form a Proportion?

ANSWER KEY

Name: _____

Class Period: 1 2 3 4 Date: _____

Check to see if each set of ratios form a proportion. If it does form a proportion, color in the box. If it does not form a proportion, leave it blank. If your answers are correct, the colored boxes should reveal an image.

$\frac{5}{4} = \frac{15}{12}$	$\frac{2}{6} = \frac{11}{8}$	$\frac{6}{9} = \frac{48}{52}$	$\frac{6}{4} = \frac{24}{16}$
$\frac{6}{12} = \frac{1}{2}$	$\frac{13}{10} = \frac{26}{18}$	$\frac{1}{10} = \frac{8}{80}$	$\frac{5}{7} = \frac{20}{30}$
$\frac{27}{36} = \frac{3}{4}$	$\frac{5}{9} = \frac{20}{36}$	$\frac{12}{8} = \frac{24}{22}$	$\frac{1}{2} = \frac{2}{3}$
$\frac{4}{3} = \frac{12}{9}$	$\frac{19}{14} = \frac{8}{7}$	$\frac{5}{3} = \frac{25}{15}$	$\frac{3}{10} = \frac{10}{3}$
$\frac{35}{25} = \frac{7}{5}$	$\frac{7}{11} = \frac{28}{33}$	$\frac{4}{7} = \frac{24}{46}$	$\frac{18}{27} = \frac{4}{6}$

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Ada

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

1.
$$\frac{7}{4} = \frac{28}{40}$$
 A = 10 2. $\frac{5}{4} = \frac{B}{36}$ B = 45 3. $\frac{1}{3} = \frac{C}{15}$ C = 5

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

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



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

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

4.
$$\frac{5}{D} = \frac{35}{63}$$
 D = 9 5. $\frac{2}{5} = \frac{E}{20}$ **E = 8 6.** $\frac{2}{18} = \frac{L}{27}$ **L = 3**

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

7.
$$\frac{6}{N} = \frac{12}{14}$$
 N = 7 8. $\frac{9}{11} = \frac{0}{44}$ O = 36 9. $\frac{2}{8} = \frac{R}{4}$ R = 1

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

10.
$$\frac{5}{V} = \frac{25}{30}$$
 V = 6 11. $\frac{7}{4} = \frac{Y}{28}$ Y = 49

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

$$\frac{\mathsf{D}}{9}$$

$$\frac{\mathbf{B}}{45}$$

$$\frac{B}{45}$$
 $\frac{Y}{49}$ $\frac{R}{1}$ $\frac{O}{36}$

$$\frac{\mathbf{O}}{36}$$

$$\frac{O}{36}$$
 $\frac{V}{6}$ $\frac{E}{8}$ $\frac{L}{3}$ $\frac{A}{10}$ $\frac{C}{5}$ $\frac{E}{8}$