

RATIO, PROPORTION AND PERCENT WORKSHEET

Name: _____

Ratios

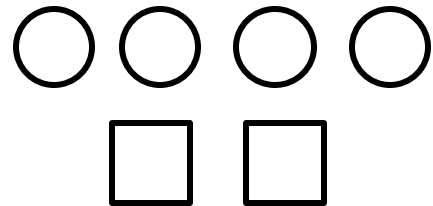
1) The ratio of red to white flowers is 2:5. If both the number of red and white flowers is doubled, what is the new ratio of red to white flowers?

2) Which ratio does not belong in the group? $\frac{2}{5}$, $\frac{4}{10}$, $\frac{1}{2.5}$, $\frac{14}{35}$, $\frac{5}{10.5}$, $\frac{9}{22.5}$

3) Keeping the ratio the same, how many circles and squares do you need to add to have a total of 12 (circles plus squares)?

Circles: _____

Squares: _____



4) Explain how you solved problem 3. Will the same procedure work to get a total of 15 (circles plus squares)? How many would you add for 15?

Circles: _____

Squares: _____

5) Why do we prefer to have ratios in fraction form? Can you give an example?

6) Give two examples (not in the *Algebra World* program or your textbook) of rates. Write them in fraction form.

7) Give an example of a unit rate (not in the *Algebra World* program or your textbook) that you see or use everyday.

Name: _____

8) For the following ratio pairs, fill in the appropriate sign: greater than ($>$); less than ($<$); or equal ($=$).

a) $\frac{2}{3}$ — $\frac{6}{9}$

b) $\frac{3}{4}$ — $\frac{76}{102}$

c) $\frac{5}{4}$ — $\frac{25}{20}$

b) $\frac{13}{33}$ — $\frac{195}{47.5}$

c) $\frac{7}{3}$ — $\frac{21}{8}$

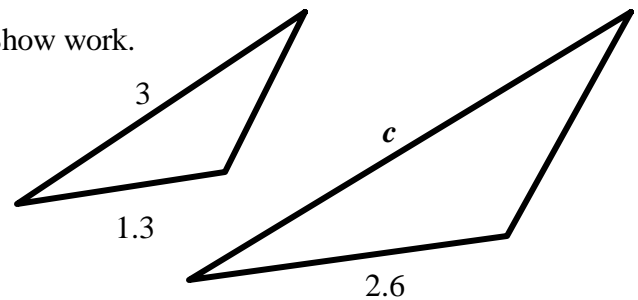
d) $\frac{11.5}{23}$ — $\frac{34}{56}$

Proportions

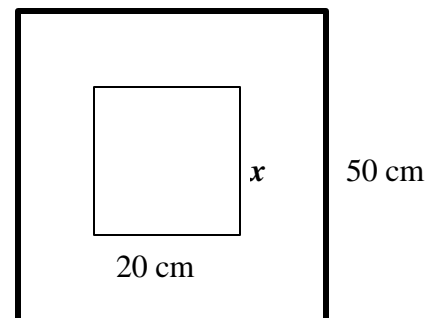
9) Solve proportion, $\frac{2}{x} = \frac{7}{14}$. Show each step of the process you use.

10) A sports car can drive 1,300 kilometers in one day. How many days for the sports car to drive 4,290 kilometers? Set up as a proportion equation and solve.

11) A and B are similar triangles. What is side c ? Show work.



12) For the similar squares below, find x .



Percent

13) What is a percent and why are percents important?

14) Describe four things in the day that are described by a percent. Look through a newspaper or magazine if you need to.

15) Write the following as percents:

a) $\frac{1}{2} = \underline{\hspace{2cm}} \%$ b) $0.75 = \underline{\hspace{2cm}} \%$ c) $\frac{3}{8} = \underline{\hspace{2cm}} \%$ d) $1.5 = \underline{\hspace{2cm}} \%$

e) $\frac{2}{3} = \underline{\hspace{2cm}} \%$ f) $5.3 = \underline{\hspace{2cm}} \%$ g) $\frac{7}{6} = \underline{\hspace{2cm}} \%$ h) $1 = \underline{\hspace{2cm}} \%$

16) Why can you solve percent problems as a proportion problem?

17) What does it mean for a percent to be greater than 100%? For example 150%. Give an example where greater than 100% might be used.

18) A \$200 bicycle is on sale with a 30% discount. How much is the sale price?

