

Concept: Ratios and Proportions

Name: _____

COMPUTER COMPONENT

Instructions: In  follow the **Content Menu** path:

Fractions > Ratios and Proportions

 Work through all Sub Lessons of the following Lessons **in order**:

- *Ratios in the News*
- *Ratio, Tape Diagram*
- *Writing Ratios*
- *Rate and Unit Rate*
- *What is a Proportion*
- *Proportions with Pattern Blocks*
- *Proportions*
- *Ratio Table*
- *Ratios and your Body*



As you work through the computer exercises, you will be prompted to make notes in your notebook/math journal.

NOTES

1. *Confirm your knowledge of ratios by circling the correct responses below.*

- | | |
|--|---|
| (a) A ratio is a comparison of ... | <p>A one number with another number.</p> <p>B one fraction with another fraction.</p> |
| (b) The order you write the ratio ... | <p>A is not important.</p> <p>B is important.</p> |
| (c) Ratios should always be ... | <p>A left in their original form.</p> <p>B simplified.</p> |
| (d) When dealing with a ratio, one must... | <p>A never use the same units.</p> <p>B always use the same units.</p> |
| (e) A proportion ... | <p>A works with equivalent fractions.</p> <p>B works with percentages.</p> |

(f) Which of the following is **not** a correct method of writing a ratio?

A 4 : 3


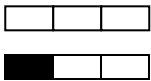


B $\frac{5}{3}$

C 8 , 9

D 4 to 5

OFF COMPUTER EXERCISES

1. Fill in the chart.

	Drawing	Ratio of White to Black	Ratio of Black to White	Ratio of Black to the total
(a)				
(b)				
(c)				
(d)				

2. At a summer camp, there are 56 boys and 72 girls. Find the ratio of:

(a) Boys to the total number of campers. _____

(b) Girls to boys. _____

Can you show your ratio in 3 different ways?

Remember: A **unit rate** is a type of rate in which the second term is 1.

3. Calculate the unit rate for each item.

(a) 6 chocolate bars for \$3.00 _____

(b) 3 batteries for \$1.80 _____

(c) 2 DVD's for \$15.00 _____

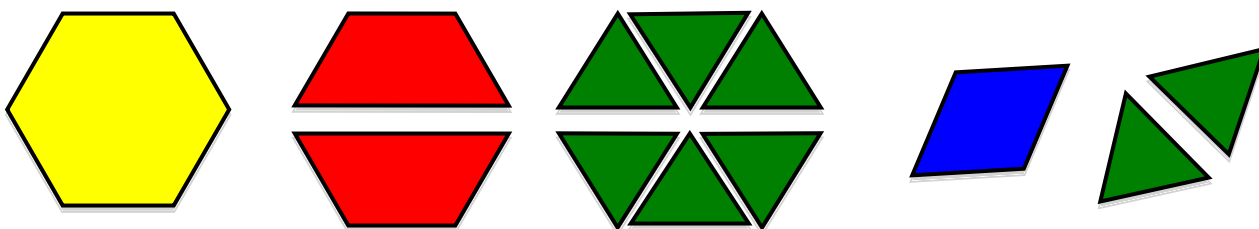
(d) 4 CD's for \$26.00? _____

4. The following people used different modes of transportation for their charity event.

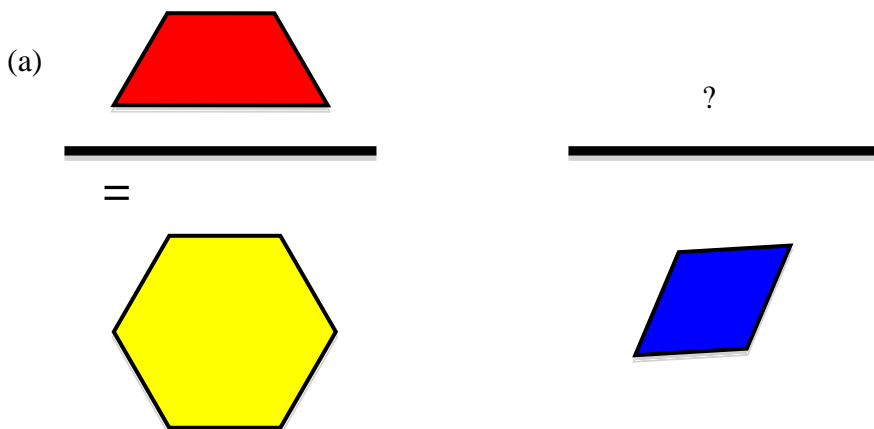
Mike walked 12 km in 3 h.
Julie cycled 11 km in 1 h.
Ricardo cycled 9 km in 30 min.
Catherine walked 10 km in 2 h.

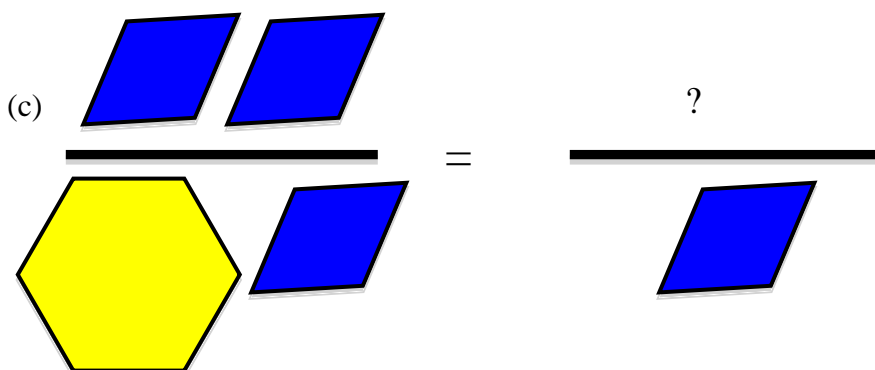
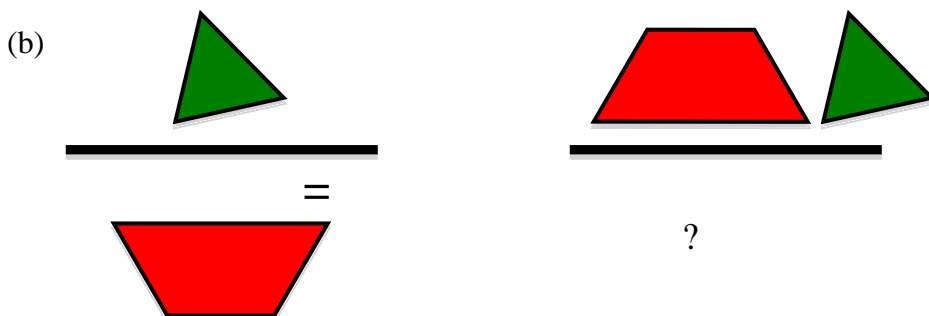
Use your knowledge of unit rates to establish who moved the fastest? *Order these speeds from least to greatest.*

5. The following pattern blocks can serve as a great learning tool when working with fractions.



Use your knowledge of pattern blocks to help you compare the following areas.





6. Each bag contains the same number of cookies. *Complete the ratio table that compares the number of bags to cookies.*

Bags	1	2	3	4	5	6
Cookies	12	24				

Can you explain how you can find the number of cookies for any number of bags?

7. Phil must combine 3 parts mix with 2 parts water to get the consistency he likes for his pancake batter. *How much pancake mix does he need for 8 parts water?*

Organize your thinking in a ratio table.

Pancake Mix	3 parts	
Water	2 parts	8 parts

Phil needs

Utilize ratio tables to organize your thinking for the following questions.

8. The ratio of chocolate chips to raisins in one cookie is 5:4.
If the recipe required 96 raisins, how many chocolate chips were used?

_____ chocolate *chips* were used.

9. *Complete the following ratio table.*

km traveled	10	30		140		90
hours	1		6		21	