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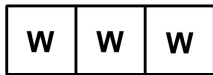
USING TABLES TO SOLVE RATIO PROBLEMS
N-GEN MATH® 6

Video Notes
link is on my weebly

Tables can help us keep track of what is happening when we work with ratios because we can continually **scale** the ratio up using **multiplication**.

Exercise #1: On a field trip, kids wore either a red shirt or a white shirt. The **ratio** of red shirts to white shirts is 5 to 3. There were 24 kids on the field trip. We want to determine how many of each color there were. Answer each of the following.

- (a) The tape diagram below represents this ratio visually. Add to the diagram until you have 24 total kids (or shirts).



- (b) If there were 40 kids on the trip instead of 24 kids and the ratio of red shirts to white shirts stayed at 5 to 3, fill in the table below to determine how many of each shirt there were.

Red Shirts	5					
White Shirts	3					
Total Shirts	8					

Red Shirts = _____

White Shirts = _____

Exercise #2: Ross has a jar with pennies and dimes in it. The ratio of pennies to dimes is 3 to 1. If there are a total of 28 coins in the jar, how many more pennies are there than dimes? Use the table below to help.

Number of pennies = _____

Number of dimes = _____

How many more pennies than dimes?

Pennies	Dimes	Total Coins



Exercise #3: A cafeteria has an unknown number of kids in it, some of whom are left-handed. The ratio of left-handed students to right-handed students is 2 to 9. Answer the following questions.

(a) What is the ratio of left-handed students **to all students**? Fill out the following:

For every _____ students _____ of them are left-handed.

Justify using a tape diagram below:

(b) If there are 45 right-handed students in the cafeteria, how many total students are there? Solve by setting up a horizontal table.

Exercise #4: Joette and Ada are playing a card game where they score points. After one round the ratio of Joette’s points to Ada’s points is 4 to 7. If Ada has 15 points more than Joette, then find out how many points Joette has. Use a table to find your answer.



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USING TABLES TO SOLVE RATIO PROBLEMS
N-GEN MATH[®] 6 HOMEWORK

TURN THIS PAGE IN

USING YOUR MATH

1. Zeke and Niko are eating cookies. The ratio of the number of cookies Zeke ate to the number Niko ate was 2 to 1 (so Zeke had twice as many as Niko). If the total number of cookies eaten was 18 then how many did Niko eat? Finish filling in the table below to justify.

Cookie for Niko	1	2						
Cookies for Zeke	2	4						
Total Cookies	3	6						

Number of cookies Niko ate = _____

2. Liam picked tomatoes and onions from his garden this year. The ratio of the number of tomatoes to the number of onions picked was 5 to 2.

(a) Which of the following is the ratio of the number of onions picked to the total number of tomatoes and onions picked?

(1) 2 to 5

(3) 2 to 3

(2) 5 to 7

(4) 2 to 7

(b) If a total of 42 tomatoes and onions were picked, then how many more tomatoes were picked than onions? Use the table below to help justify your answer.

Number of Tomatoes								
Number of Onions								
Total								

How many more tomatoes than onions?



TURN THIS PAGE IN 2



3. Evie and Ximena go to an arcade where they win tickets. The ratio of the number of tickets Evie won to the number Ximena won is 5 to 8.

(a) If together the girls won a total of 78 tickets, then how many did each girl win? Fill out the table below to justify your answer.

Evie	5	10							
Ximena	8	16							
Total	13	26							

Number of Evie's Tickets = _____ Number of Ximena's Tickets = _____

(b) Ximena gives Evie some of her tickets so they have the same number. How many tickets does Ximena give Evie? Show how you found your answer.

