



In these activities you will work together to generate tables of equivalent ratios and solve problems using equivalent ratios. After completing each activity, discuss and/or present your findings to the rest of the class.



### Activity 1 [Page 1.3]

1. Find at least two ratios that will generate a table that contains a ratio of 24 and 42 other than 24:42. Explain your thinking.



### Activity 2 [Page 2.2]

On page 2.2 of the TNS activity, set the original ratio to 2:3; with 2 in the top row and 3 in the bottom row.

1. Tiani claimed if you added two ratios in the table, you will get another ratio that could be in the same ratio table.
  - a. Play with values in the table and decide whether you agree with Tiani.
  - b. Provide an example to explain how the distributive property works.
  - c. How might the distributive property help you explain why she is right or wrong?
2. Cases of Fresh Fruits juice contain 15 bottles of juice. Create a ratio that represents the number of full cases to the number of bottles of juice contained in them. Create a ratio table so that the sum of two of the ratios in the table results in the number of bottles of Fresh Fruits juice per case. How many cases would you have all together?
  - a. 75 bottles
  - b. 165 bottles
  - c. 1575 bottles
  - d. 330 bottles



3. Cases of Fresh Fruits juice contain 15 bottles of juice. Create a ratio that represents the number of full cases to the number of bottles of juice contained in them. Create a ratio table so that the difference of two of the ratios in the table results in the number of bottles of Fresh Fruits juice per case. What is the difference in the number of bottles for each?
- a. 8 cases      b. 6 cases      c. 13 cases      d. 99 cases



### Activity 3 [Page 3.2]

1. Reset page 3.2. Enter 1 in the bottom row of the second column.
- a. Predict the value in the top row of the second column and explain your thinking. Check your answer using the TNS activity.
- b. Remember that a unit rate is a ratio of the form  $c:1$ . If  $a$  is the number of cups of water and  $b$  is the number of batches of a pancake mix, explain what the unit rate tells you.
2. Reset page 3.2. Fill out the top row so that you have consecutive, odd integers, starting with 1. Let  $a$  represent the number of circles and  $b$  represent the number of squares.
- a. Describe the pattern for the numbers in the bottom row of the ratio table.
- b. Explain how to use the results in the table to find the number of squares if you have 8 circles.