



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



Activity 1 [Page 1.3]

1. Set the ratio to 3 blue rectangles out of a total of 5 rectangles. Estimate the missing value in each equivalent ratio, and then check your predictions using the TNS lesson. Explain why the answer makes sense in each case.
 - a. 9 blue out of ____ total number of rectangles
 - b. 9 blue to ____ pink rectangles
 - c. ____ blue rectangles to 14 pink rectangles
 - d. ____ pink rectangles out of 20 rectangles



Activity 2 [Page 1.4]

1. Reset the page. Set the ratio for 2 blue to 3 pink rectangles. Which of the following statements are true? Explain your thinking.
 - a. $\frac{2}{5}$ of the rectangles are blue rectangles.
 - b. The number of blue rectangles is $\frac{2}{3}$ of the total number of rectangles.
 - c. The number of blue rectangles is $\frac{2}{3}$ the number of pink rectangles.



Ratios and Fractions

Student Activity

Name _____

Class _____

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2. For each of the following, predict what the fraction bar on the right would look like. You may want to use the TNS lesson to check your answers.
- The ratio is 1 to 1.
 - The ratio is 1 pink rectangle for every 3 rectangles.
 - The ratio is 12 pink rectangles to 8 blue rectangles.
3. What do each of the following tell you about the number of rectangles on the left?
- The ratio of blue to pink rectangles is 15 to 5.
 - $\frac{1}{4}$ of the rectangles are pink.
 - There are 3 times as many blue rectangles as pink ones.



Ratios and Fractions

Student Activity

Name _____

Class _____

4. A *rate* gives the number of units of one quantity per the number of units of another quantity. Find the rate of boys per girls in each case. You may want to use the TNS lesson to help your thinking.
- $\frac{3}{5}$ of the class was boys.
 - Out of 40 students, 24 were boys.
 - There were twice as many boys as girls.
5. Simon walks at a rate of 3 meters every 2 seconds. Which of the following describes his pace? You may want to use the TNS lesson to help your thinking.
- 1 meter every $\frac{2}{3}$ second
 - 9 meters every 6 seconds
 - 1.5 meters per second
 - 45 meters every half a minute