

Name _____

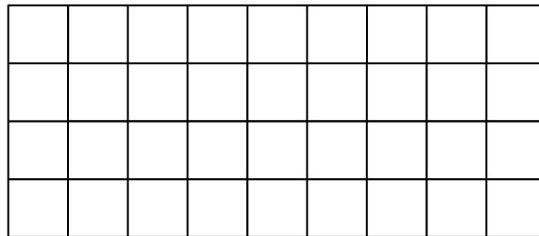
Date _____

Equivalent Ratios

Pam and her brother both open savings accounts. Each begin with a balance of zero dollars. For every two dollars that Pam saves in her account, her brother saves five dollars in his account.

1. Determine a ratio to describe the money in Pam's account to the money in her brother's account.
2. If Pam has 40 dollars in her account, how much money does her brother have in his account? Use a tape diagram to support your answer.
3. Record the equivalent ratio.
4. Create another possible ratio that describes the relationship between the amount of money in Pam's account and the amount of money in her brother's account.

1. Write two ratios that are equivalent to 1: 1.
2. Write two ratios that are equivalent to 3: 11.
3.
 - a. The ratio of the width of the rectangle to the height of the rectangle is _____ to _____.



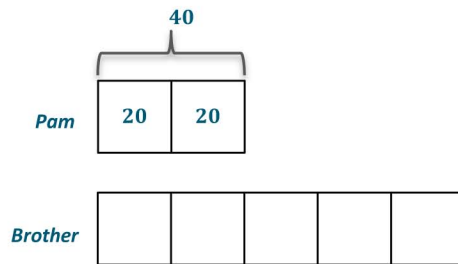
- b. If each square in the grid has a side length of 8 mm, what is the width and height of the rectangle?
4. For a project in their health class, Jasmine and Brenda recorded the amount of milk they drank every day. Jasmine drank 2 pints of milk each day, and Brenda drank 3 pints of milk each day.
 - a. Write a ratio of the number of pints of milk Jasmine drank to the number of pints of milk Brenda drank each day.
 - b. Represent this scenario with tape diagrams.
 - c. If one pint of milk is equivalent to 2 cups of milk, how many cups of milk did Jasmine and Brenda each drink? How do you know?
 - d. Write a ratio of the number of cups of milk Jasmine drank to the number of cups of milk Brenda drank.
 - e. Are the two ratios you determined equivalent? Explain why or why not.

Pam and her brother both open savings accounts. Each begin with a balance of zero dollars. For every two dollars that Pam saves in her account, her brother saves five dollars in his account.

- Determine a ratio to describe the money in Pam's account to the money in her brother's account.

2:5

- If Pam has 40 dollars in her account, how much money does her brother have in his account? Use a tape diagram to support your answer.



- Record the equivalent ratio.

40:100

- Create another possible ratio that describes the relationship between the amount of money in Pam's account and the amount of money in her brother's account.

Answers will vary. 4: 10, 8: 20, etc.

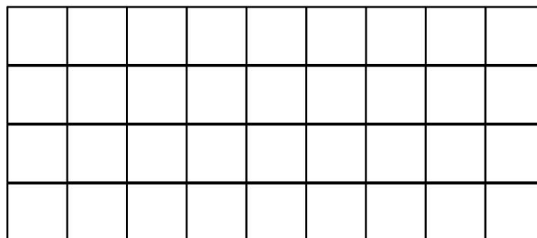
- Write two ratios that are equivalent to 1: 1.

Answers will vary. 2: 2, 50: 50, etc.

- Write two ratios that are equivalent to 3: 11.

Answers will vary. 6: 22, 9: 33, etc.

- The ratio of the width of the rectangle to the height of the rectangle is 9 to 4.



- b. If each square in the grid has a side length of 8 mm, what is the width and height of the rectangle?

72 mm wide and 32 mm high.

4. For a project in their health class, Jasmine and Brenda recorded the amount of milk they drank every day. Jasmine drank 2 pints of milk each day, and Brenda drank 3 pints of milk each day.

- a. Write a ratio of the number of pints of milk Jasmine drank to the number of pints of milk Brenda drank each day.

2:3

- b. Represent this scenario with tape diagrams.

Jasmine



Brenda



- c. If one pint of milk is equivalent to 2 cups of milk, how many cups of milk did Jasmine and Brenda each drink? How do you know?

Jasmine drank 4 cups of milk, and Brenda drank 6 cups of milk. Since each pint represents 2 cups, I multiplied Jasmine's 2 pints by 2 and multiplied Brenda's 3 pints by 2.

- d. Write a ratio of the number of cups of milk Jasmine drank to the number of cups of milk Brenda drank.

4:6

- e. Are the two ratios you determined equivalent? Explain why or why not.

2:3 and 4:6 are equivalent because they represent the same value. The diagrams never changed, only the value of each unit in the diagram.