

## Bad Date Learner Guide

Watch the video, *Bad Date*, and complete these activities. The video and an instructor guide are available on iTunes U (search "Math Snacks") and at **mathsnacks.org** 

A ratio is a comparison of two numbers.

In the Bad Date movie, Isabella spoke **one** word for every **seven** words that Mike spoke.



The **ratio** of her words to his words is one to seven or **1:7**. We generally separate the two numbers in the ratio with a colon (:).



Here are examples of 6:1 ratios. On her second date, Isabella spoke 36 words, and Diego spoke only 6, for a 6:1 ratio. In other Isabella's words **Diego's Words** words, she spoke six times as many words. 36 words 6 words 18 words 3 words Stuck? Draw a 6 words 1 word picture of Isabella and Diego to show 1. Use the ratio 6:1 to find the answers. how many words each says on a 6:1 ratio. A. If Isabella spoke 12 words, how many words did Diego speak? 12 words **B.** If Diego spoke **20 words**, how many words did Isabella speak? 20 words C. What if she spoke 60 words? 60 words D. What if he spoke 32 words? 32 words

Math Snacks Bad Date Student Learner Guide

http://www.mathsnacks.org

2. Find the ratio 5:7!		
Brother's TV Time	Sister's TV Time	My brother watches five hours of TV for every seven
5	7	hours that I watch.
A. If the brother watched 10 hours of TV over the weekend, how much TV did the sister watch?		
<b>B.</b> If the brother watched <b>1 hour</b> of TV, how much TV did the sister watch?		
<b>C.</b> If the sister watched <b>10.5 hours</b> , how much TV did the brother watch?		It's a ratio of 5 to 7 (5:7).

Β.

С.

There are lots of situations in which **1:1 ratios** are desirable – or even required. For example, in a basketball game, each team has 5 players on the court, so the ratio of players is 5:5 or 1:1. Likewise, in a football game, each team fields 11 players, so the ratio is 1:1.

## 3. Can you think of three other situations in which a 1:1 ratio is desirable?A.

4. Can you think of three situations in which a 1:1 ratio is not desirable or possible?
Α.

There are lots of situations in which **1:1 ratios** are not desirable or possible. For example, in a bus, there could be 1 bus driver for 44 students, so the ratio of bus drivers to students would be **1:44**.

At the end of the last date, the ratio of words was <b>57:56</b> .	5. Why did Harvey say "bread"?
	<b>A.</b> If Harvey had not said "bread," would Isabella still consider it a one-to-one ratio? Explain.
57 : 56 Isabella : Harvey	
	<b>B.</b> What other ratios would be acceptable to Isabella to consider the date successful? Explain.

NM Learning Games Lab

Β.

С.

© 2010 NMSU Board of Regents. All rights reserved. Developed with support from the National Science Foundation (0918794) and the U.S. Department of Education (U295A050004). NMSU is an equal opportunity/affirmative action employer and educator. NMSU and the U.S. Department of Agriculture cooperating.