Name _____ Date_____

Comparing Ratios Using Ratio Tables

Beekeepers sometimes supplement the diet of honey bees with sugar water to help promote colony growth in the spring and help the bees survive through fall and winter months. The tables below show the amount of water and the amount of sugar used in the Spring and in the Fall.

Spring Sugar Water Mixture	
Sugar (cups)	Water (cups)
6	4
15	10
18	12
27	18

Fall Sugar Water Mixture	
Sugar (cups)	Water (cups)
4	2
10	5
14	7
30	15

Write a sentence that compares the ratios of the number of cups of sugar to the number of cups of water in each table.

Explain how you determined your answer.

1. Sarah and Eva were swimming.

   a. Use the ratio tables below to determine who the faster swimmer is.

   Sarah

Time (min)	3	5	12	17
Distance (meters)	75	125	300	425

   Eva

Time (min)	2	7	10	20
Distance (meters)	52	182	260	520

   b. Explain the method that you used to determine your answer.

2. A 120 lb. person would weigh about 20 lb. on the earth's moon. A 150 lb. person would weigh 28 lb. on Io, a moon of Jupiter. Use ratio tables to determine which moon would make a person weigh the most.

Beekeepers sometimes supplement the diet of honey bees with sugar water to help promote colony growth in the spring and help the bees survive through fall and winter months. The tables below show the amount of water and the amount of sugar used in the Spring and in the Fall.

Spring Sugar Water Mixture	
Sugar (cups)	Water (cups)
6	4
15	10
18	12
27	18

Fall Sugar Water Mixture	
Sugar (cups)	Water (cups)
4	2
10	5
14	7
30	15

Write a sentence that compares the ratios of the number of cups of sugar to the number of cups of water in each table.

The value of the ratio for the Spring Sugar Water is $\frac{1.5}{1}$, while the value of the ratio of the Fall Sugar Water is $\frac{2}{1}$. Therefore, the Fall Sugar Water Mixture has more sugar mixed in for every cup of water added to the mixture than the Spring Sugar Water Mixture.

Explain how you determined your answer.

Spring: $\frac{6}{4} = \frac{3}{2} = \frac{1.5}{1}$

Fall: $\frac{4}{2} = \frac{2}{1}$

1. Sarah and Eva were swimming.

   a. Use the ratio tables below to determine who the faster swimmer is.

   Sarah

Time (min)	3	5	12	17
Distance (meters)	75	125	300	425

   Eva

Time (min)	2	7	10	20
Distance (meters)	52	182	260	520

   Eva is the faster swimmer because she swims 26 meters in 1 minute, which is faster than Sarah who swims 25 meters in 1 minute.

   b. Explain the method that you used to determine your answer.

   Answers will vary.

2. A 120 lb. person would weigh about 20 lb. on the earth's moon. A 150 lb. person would weigh about 28 lb. on Io, a moon of Jupiter. Use ratio tables to determine which moon would make a person weigh the most.

   Answers will vary. A person on Io will weigh more than a person on our moon.