

Lesson 7: Solve Multiplicative Comparison Problems

- Let's solve real-world multiplicative comparison problems.

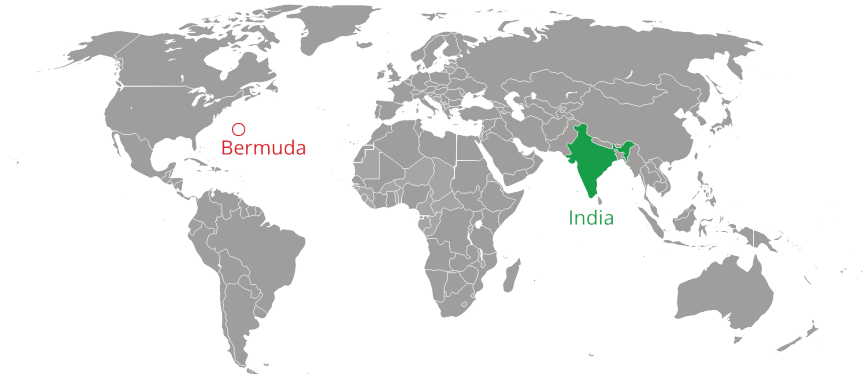
Warm-up: Notice and Wonder: Two Cities

What do you notice? What do you wonder?

	San Francisco, CA	Fort Wayne, IN
population	805,235	253,691
milk (1 gallon)	\$4.45	\$2.14
bread (1 loaf)	\$3.54	\$1.82
gasoline (1 gallon)	\$3.70	\$2.42
movie ticket	\$15	\$12
internet connection (1 month)	\$70	\$50
rent for a 3 bedroom apartment in the city center (1 month)	\$6,000	\$1,500
cost of a house	\$1,400,000	\$160,000

7.1: The Most and Least Expensive

Bermuda is the most expensive country in the world and India is one of the least expensive.



- The table shows how prices of some things in the two countries compare. Estimate or calculate the missing costs and complete the table.

	Bermuda	cost in Bermuda is _____ as in India	India
a meal with drink (1 person)		12 times as much	\$2
gasoline (1 gallon)	\$8	2 times as much	
brand-name jeans		2.5 times as much	\$31
men's leather shoes	\$143	4 times as much	
internet connection		14 times as much	\$13

2. In India, rent for a 1-bedroom apartment outside of a city center costs about \$76 per month. A similar apartment in Bermuda costs 23 times as much.

Utilities (electric, gas, water, and heating) for a small apartment costs about \$27 per month in India and 7 times as much in Bermuda.

If a person earns \$2,000 per month, can they afford to pay rent and utilities in Bermuda?

7.2: The Cost of Living

The cost of living in the United States is higher than in Ghana.



- The table shows how the prices of some other things in the two countries compare. Estimate or calculate the missing information in the table.

monthly cost	United States	cost in the US is _____ as in Ghana	Ghana
1-bedroom apartment in city center	\$1,300	2 times as much	
1-bedroom apartment outside of city center		9 times as much	\$112
utilities for a 915 square foot apartment	\$152		\$73
transportation pass	\$70	3 times as much	
private preschool for 1 child	\$906		\$162

2. Suppose a family has \$3,000 for housing and wants a 1-bedroom apartment outside of a city center. With that amount of money, how many months of rent can they afford in:

a. the United States? Explain or show your reasoning.

b. Ghana? Explain or show your reasoning.