## 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.



1. The table shows how prices of some things in the two countries compare. Estimate or calculate the missing costs and complete the table.
* 
1. 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.





1. The table shows how the prices of some other things in the two countries compare. Estimate or calculate the missing information in the table.
* 
1. 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:
	1. the United States? Explain or show your reasoning.
	2. Ghana? Explain or show your reasoning.



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