

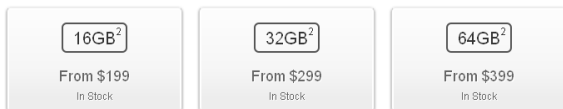
2-5 Context

Name _____

Per. ____

Find the **rate of change** and identify the **type** of function.

1. According to Apple's website, here are the following prices for an iPhone 5S with different amounts of memory.



Is there a relationship between memory (in GB) and price?? **SHOW** why or why not.

IF LINEAR, describe the rate of change in words and predict what an iPhone 5S with 8 GB of memory would cost.

2. You are a very generous person who loves to give good tips to your server when you go out to eat. You always tip 20%. Make a table for your **total bill** for meals that cost \$7.50, \$20, and \$45.

Is there a linear relationship between the cost of a meal and the total bill? **SHOW** why or why not.

IF LINEAR, describe the rate of change in words and predict your total bill for a \$10 meal.

3. The prices below are from a Citgo gas station for regular, mid-grade, and premium gas. Each type of gas has its own Octane rating.



87-Octane
89-Octane
91-Octane

Is there a linear relationship between the octane rating and the price of gas? **SHOW** why or why not.

IF LINEAR, describe the rate of change in words and predict the cost of gasoline for 95-Octane.

4. At 2:00 a.m., the temperature outside was 42°F . Every hour the temperature increased 2.5°F .

Is there a linear relationship between the time and temperature? **SHOW** why or why not.

IF LINEAR, describe the rate of change in words and predict the temperature at 4:00 a.m.