

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Piecewise Functions: Problem solving

In many areas, utility companies compete with others in order to gain business. For example, you may see numerous commercials for gas companies like Georgia Natural Gas or Scana. So how can you determine which company is best for you? Well it will depend on how much you use, and each company tries to find ways to attract more clients than their competitors. Below is an advertisement for a fake electricity company “Lights and Power”



1. According to the advertisement, how much does the first 1,000 kilowatt-hours (kWh) of electricity cost a customer?
2. Last month you used 1,200 kilowatt-hours of electricity.
  - a. How much did you pay for the first 1,000 kilowatt-hours?
  - b. How much did you pay for the next 200 kilowatt-hours?
  - c. How much did you pay total for the month?
3. Using the information from the advertisement determine the monthly cost for each of the following kilowatt-hours

Amount of kWh	Cost (\$)
700	
800	
900	
1,000	

Amount of kWh	Cost (\$)
1,100	
1,200	
1,300	
1,400	

Amount of kWh	Cost (\$)
1,500	
1,600	
1,700	
1,800	

