

**Bostic, J.** (December 2012/January 2013). Model-eliciting activities for teaching mathematics. *Mathematics Teaching in the Middle School*, 18, 262 – 266.

### Southernville Pizza

**Directions: Use your knowledge of ratios, rates, unit rates, data representations, and data analysis to answer the questions below. Please show all of your work for every problem-solving step. Create a math model and use a strategy to find the result for each question. Carry out your work here and use the back of the paper, if needed. Answer all questions in complete sentences that fully justify and explain your solution.**

The city of Southernville has many places to purchase a pizza. Jeremy decides to create a website to provide residents with information that may help them decide where to purchase their pizza. The following data provide the cost of a cheese pizza, a pepperoni pizza, a large pizza with five toppings, the diameter of a large pizza, and the number of slices on a large pizza:

<b>Pizza Restaurant</b>	<b># of Slices on Large pizza</b>	<b>Diameter of Large Pizza (in.)</b>	<b>Cost of Large Cheese Pizza (dollars)</b>	<b>Cost of Large Pepperoni Pizza (dollars)</b>	<b>Cost of Large Pizza with 5 Toppings (dollars)</b>
Pizza Hut	8	14	10.00	10.00	10.00
Papa Johns	8	14	8.99	9.99	12.99
Domino's	8	14	9.99	7.99	15.06
Five Star	8	14	8.99	10.49	12.99
Leonardo's	8	14	8.75	10.95	16.50
Hungry Howie's	8	14	10.55	12.95	16.05
Pizza Vito	8	14	10.95	12.70	19.95

Q1: Create a data representation that Jeremy might display on his website to help customers decide on what pizza to buy from a restaurant.

Q2: Write a letter describing the best value for a pizza that your family might be interested in purchasing. Write in a way that a 6<sup>th</sup> grade student might understand.

**\*\*\*Check your work with one other person. If they have something different, write it in pen near your answer because we will discuss them later.\*\*\***