



Mathematics Benchmark

Constructed Response Marking Scheme



Grade: High School Algebra II

Item Description: Pizza Deals

Mathematical Content

1 point

The best days to buy pizza are between February 10th and February 13th.

The difference between the cost of the pizza on the 9th day and the cost on the 8th day is \$3.

$$\begin{aligned}C(9) - C(8) &= 20 - (9+8) \\ &= 20 - 17 \\ &= 3\end{aligned}$$

Mathematical Process

2 points:

- Clearly explains the best days to buy pizza.
- Uses function notation to accurately calculate the difference between day 9 and day 8.
- Interprets the meaning in the context of the problem accurately.

1 point:

- Accurately justifies reasoning in one out of the two questions
- Student demonstrates partial understanding of function notation. For example, the student is able to clearly explain the best days to buy pizza however, has little understanding of function notation.

0 points:

- Shows little or no understanding of function notation.
- Made an attempt to answer one or both questions, but has little to understanding when justifying reasoning.
- The student provides a completely incorrect explanation or justification, one that cannot be interpreted, or there is no response.