MAT.08.TE.2.0000F.A. 148

| Sample Item ID: | MAT.08.TE.2.0000F.A. 148 |
| :---: | :---: |
| Grade: | 08 |
| Primary Claim: | Claim 2: Problem Solving <br> Students can solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies. |
| Secondary Claim(s): | Claim 1: Concepts and Procedures <br> Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency. |
| Primary Content Domain: | Functions |
| Secondary Content <br> Domain(s): |  |
| Assessment Target(s): | 2 A: Apply mathematics to solve well-posed problems arising in everyday life, society, and the workplace. <br> 2 B: Select and use appropriate tools strategically. <br> 1 F: Use functions to model relationships between quantities. |
| Standard(s): | 8.F. 5 |
| Mathematical Practice(s): | 1, 2, 4 |
| DOK: | 2 |
| Item Type: | TE |
| Score Points: | 2 |
| Difficulty: | M |
| Key: | See Sample Top-Score Response. |
| Stimulus/Source: |  |
| Target-Specific Attributes (e.g., accessibility issues): |  |
| Notes: | The purpose of this item is to determine if students can sketch a graph that matches the verbal description of a function. |

## Carla rode her bike to her grandmother's house. The following information describes her trip:

- For the first 5 minutes, Carla rode fast and then slowed down. She rode 1 mile.
- For the next 15 minutes, Carla rode at a steady pace until she arrived at her grandmother's house. She rode 3 miles.
- For the next 10 minutes, Carla visited her grandmother.
- For the next 5 minutes, Carla rode slowly at first but then began to ride faster. She rode 1 mile.
- For the last 10 minutes, Carla rode fast. She rode 3 miles at a steady pace.

Graph each part of Carla's trip. To graph part of her trip, first click the correct line type in the box. Then click in the graph to add the starting point and the ending point for that part of her trip. Repeat these steps until a graph of Carla's entire trip has been created.


