## Unit 4 Lesson 6: Finding Interesting Points on a Graph

### 1 Notice and Wonder: Unemployment Percentage (Warm up)

#### Student Task Statement

What do you notice? What do you wonder?



### 2 Examining Unemployment Percentages

#### Student Task Statement

This graph shows the percentage of the workforce that is unemployed in the United States and Michigan for several years.



1. For the United States, what are the highest and lowest points on the graph? What do the points mean in the situation?
2. For Michigan, what are the highest and lowest points on the graph? What do the points mean in the situation?

### 3 The Wire

#### Student Task Statement

1. Use technology to graph the function $f(x)=x^{4}−16x^{3}+86x^{2}−176x+105$.
2. What are some points on the graph that you think are interesting? Explain your reasoning.
3. Examine the graph representing electrical voltage in a wire as a function of time. What interesting points do you see? Explain your reasoning.
* 
1. Use the points you found to describe what is happening to the voltage within the wire.



© CC BY 2019 by Illustrative Mathematics®