Video

▶ The Express Lane

Some supermarkets have self checkout lanes. Customers scan their items themselves and then pay with either cash or credit when they have finished scanning all of the items. Some customers think these lanes are faster than the checkout lanes with cashiers, but others don't like having to bag all of their purchases themselves.

What's your strategy for picking a checkout lane at the grocery store? Think about this during the Mathematical Modeling in 3 Acts lesson.

ACT 1 **Identify the Problem**

1. What is the first question that comes to mind after watching the video?

2. Write down the main question you will answer about what you saw in the video.

3. Make an initial conjecture that answers this main question.

4. Explain how you arrived at your conjecture.

5. What information will be useful to know to answer the main question? How can you get it? How will you use that information?

ACT 2 **Develop a Model**

6. Use the math that you have learned in this Topic to refine your conjecture.

ACT 3 **Interpret the Results**

7. Did your refined conjecture match the actual answer exactly? If not, what might explain the difference?