## Unit 4 Lesson 18: Modeling Price Information

### 1 What’ll It Be? (Warm up)

#### Student Task Statement

The points on the graph represent the average resale price of a toy in dollars as a function of time.



1. Use the information to predict the average resale price of the toy on day 12. Explain your reasoning.
2. How confident are you in your predictions? Explain your reasoning.

### 2 Collectable Toy Price

#### Student Task Statement

The graph shows the average resale price for a toy in dollars as a function of time in days.



1. Estimate the average rate of change for the first 10 days.
2. Estimate the rate of change between days 9 and 10.
3. Write a linear function, $f$, that models the data.
4. Predict the price of the toy after 12 days.

### 3 More Information

#### Student Task Statement

After a few more days, a graph of the average price of the toy looks like this.



1. Draw a function (it does not need to be linear) that could model the data.
2. Use your graph to predict the average price of the toy after 12 days. How confident are you in this answer?
3. Pause here to get additional information from your teacher about the price of the toy. Based on the new information, do you have a new prediction for what happens to the average price of the toy after 12 days? Explain your reasoning.



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