



**Unit 2: Univariate Data**

**Lesson 2.8: Modeling with other Toolkit Functions**

Fathom File: Revenue

1. Analyze the Data

- choose model
- analyze residuals (pattern and magnitude)
- comment on model appropriateness

2. Answer the following questions using your model.

a) How should the owner maximize his revenue? What should his new price be of the product? What will his maximum revenue be if he uses this price?

b) At what point does the store owner see his revenue first reach \$2000?

c) What price range should the store owner consider if he is only interested in making at least \$2500 a day off of this product?



Fathom File: Sheriff

1. Analyze the Data

- choose model
- analyze residuals (pattern and magnitude)
- comment on model appropriateness

2. Answer the following questions using your model.

a) What is the response time for a call that is at mile marker 115?

b) What mile markers will require a response time of 20 minutes?



Fathom File: Car Skids

1. Analyze the Data

-choose model

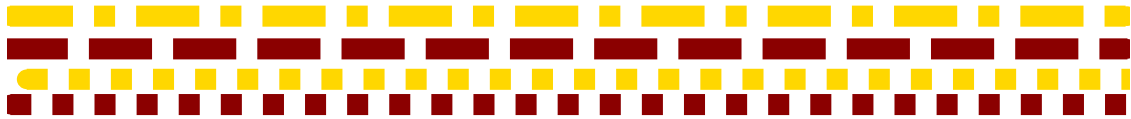
-analyze residuals (pattern and magnitude)

-comment on model appropriateness

2. Answer the following questions using your model.

a) What will be the speed of a car whose skid length was 89.4 ft long?

b) How long would a skid mark length be for a car traveling 63 mph?



Classwork/Homework

PS 2.8