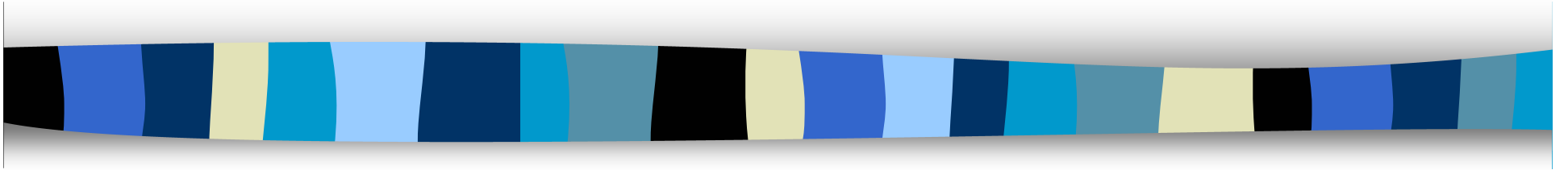




# Module One



## Braking Into Fathom



# Module One

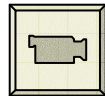
## Braking Into Fathom

- Braking Into Sliders
- Zoom and Residuals
- Creating Scatter Plots
- Fitting Functions to Data
- Total Stopping Distance
- Reaction/Perception Distance
- Internet Data Capture

# 1.1 Braking Into Sliders

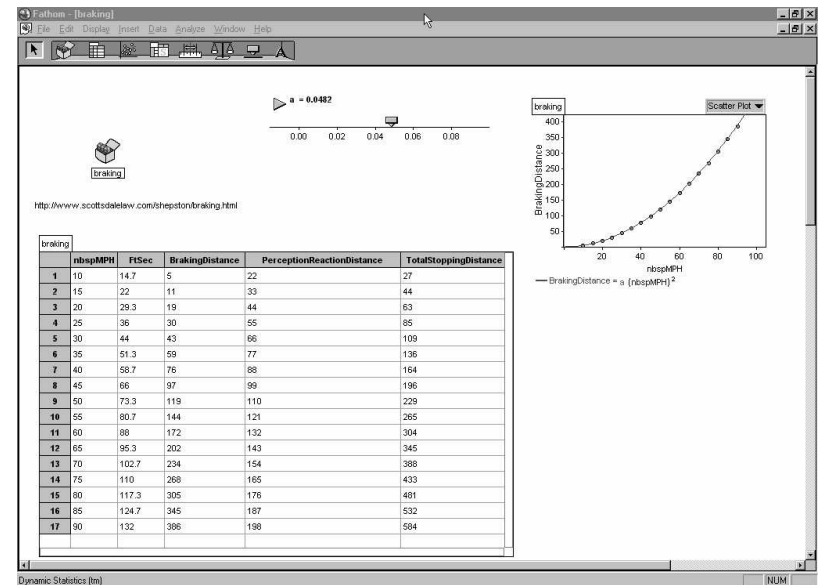
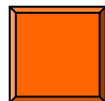
- Click the icon below to the right to view the video clip

*(1 minute)*





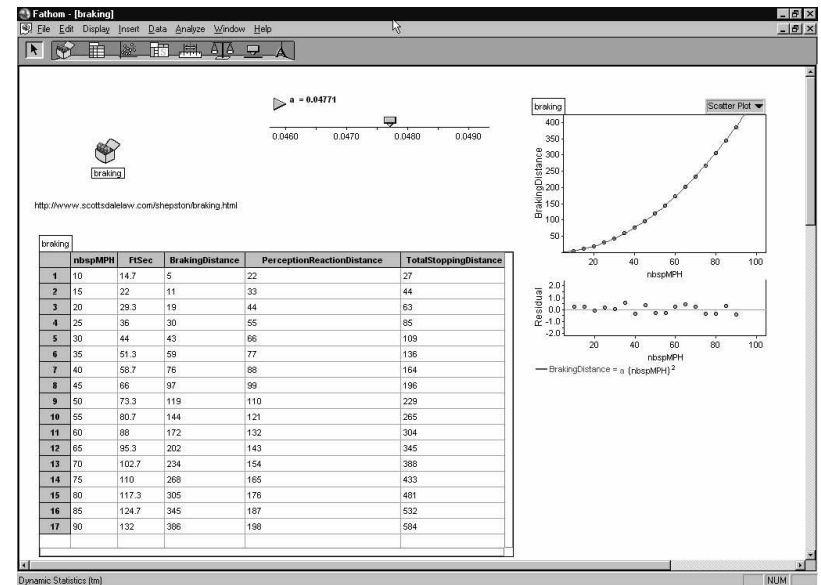
- After watching the video clip, open the Braking.ftm file by clicking on the icon below and try this for yourself!

*(5 minutes)*





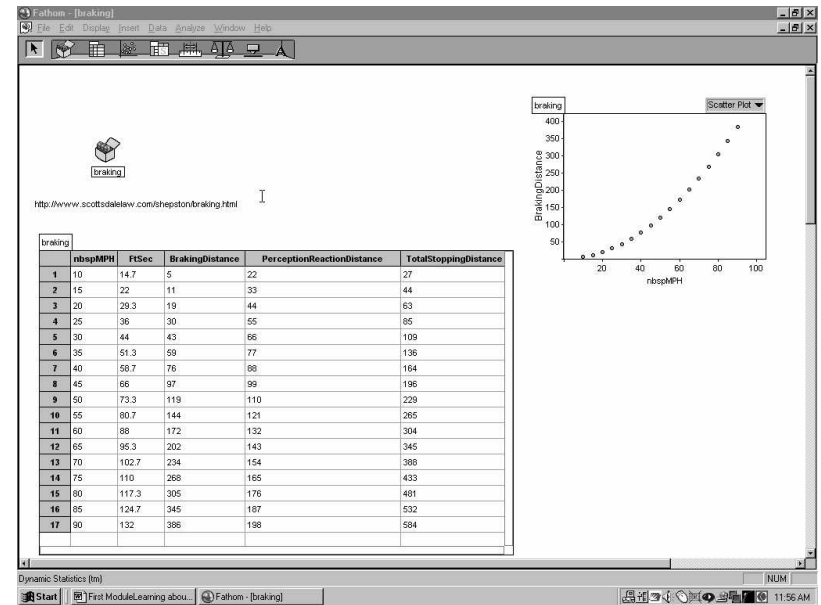
# 1.2 Zoom and Residuals

- Click the icon below to view the video clip  
(2 minutes) 
- After watching the video clip, open the Braking.ftm file by clicking on the icon below and try this for yourself!  
(5 minutes) 





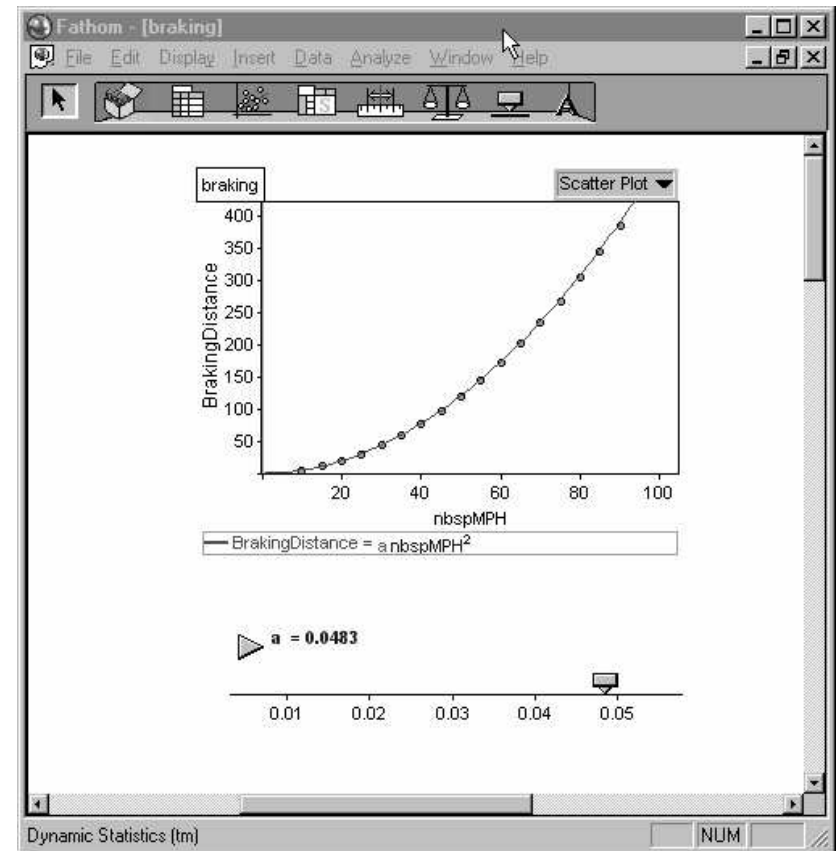
# 1.3 Creating Scatter Plots

- Click the icon below to view the video clip  
(1 minute) 
- After watching the video clip, open the Braking.ftm file by clicking on the icon below and try this for yourself!  
(5 minutes) 





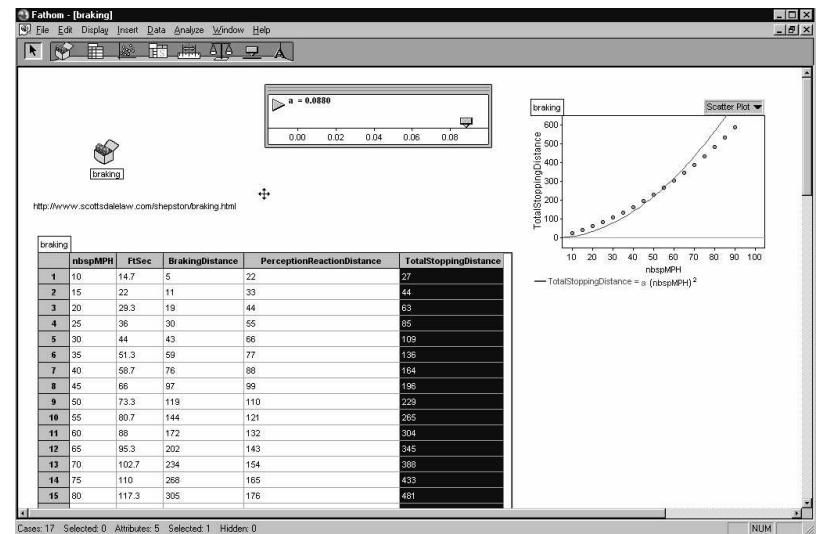
# 1.4 Fitting Functions to Data

- Click the icon below to view the video clip  
(4 minutes) 
- After watching the video clip, open the Braking.ftm file by clicking on the icon below and try this for yourself!  
(10 minutes) 

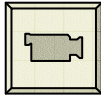
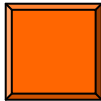


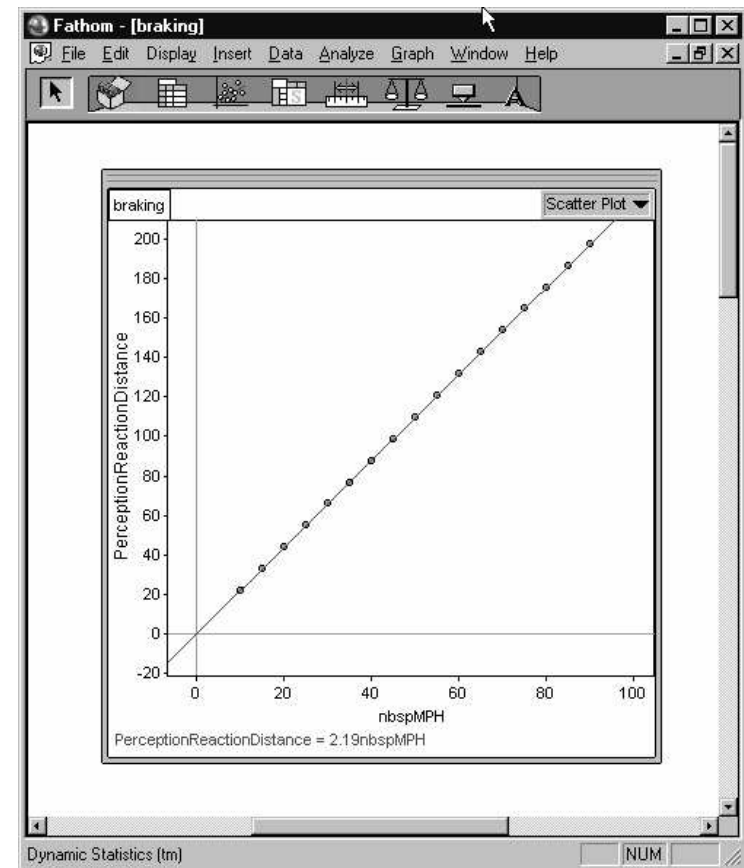
# 1.5 Total Stopping Distance

- Click the icon below to view the video clip  
(1 minute) 
- After watching the video clip, open the Braking.ftm file by clicking on the icon below and try this for yourself!  
(5 minutes) 



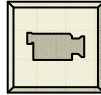
# 1.6 Reaction/Perception Distance

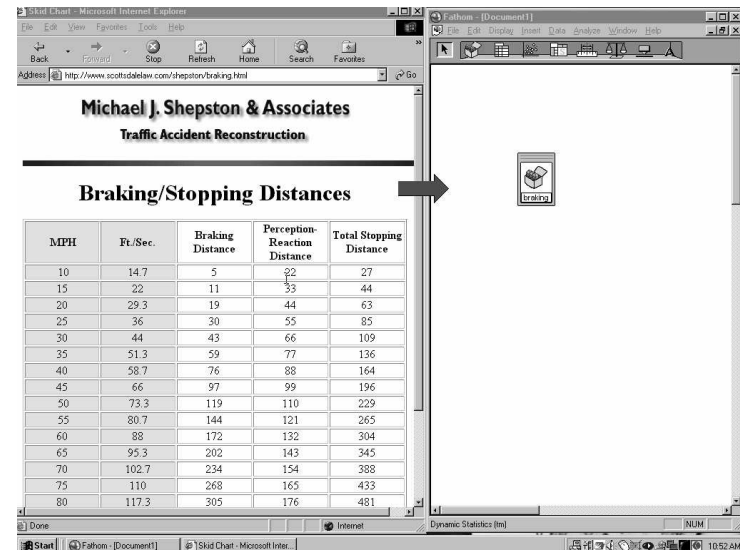
- Click the icon below to view the video clip  
(4 minutes) 
- After watching the video clip, open the Braking.ftm file by clicking on the icon below and try this for yourself!  
(5 minutes) 





# 1.7 Internet Data Capture

- Click the icon below to view the video clip  
(3 minutes) 
- After watching the video clip, open your web browser and Fathom and try this for yourself!  
(10 minutes)



The screenshot shows a Microsoft Internet Explorer browser window displaying a website for Michael J. Shepston & Associates, Traffic Accident Reconstruction. The website features a table titled "Braking/Stopping Distances" with the following data:

MPH	Ft./Sec.	Braking Distance	Perception-Reaction Distance	Total Stopping Distance
10	14.7	5	22	27
15	22	11	33	44
20	29.3	19	44	63
25	36	30	55	85
30	44	43	66	109
35	51.3	59	77	136
40	58.7	76	88	164
45	66	97	99	196
50	73.3	119	110	229
55	80.7	144	121	265
60	88	172	132	304
65	95.3	202	143	345
70	102.7	234	154	388
75	110	268	165	433
80	117.3	305	176	481

To the right of the table is a Fathom software window with a video camera icon. An arrow points from the table to the icon, indicating that the data in the table is being captured into the Fathom software.



## 1.8 Your Reflections

- You have begun to explore the “big ideas” of the Grade 10 Curriculum related to Quadratic Models with Fathom
- In the online discussion area, write your reflections on:
  - the relevance of Fathom in helping students learn these “big ideas” of the Grade 10 Curriculum, and
  - how the approach in Module One is different than the current approach(es) you use to get at these “big ideas”?

*(20 minutes)*