

Graphical Derivatives

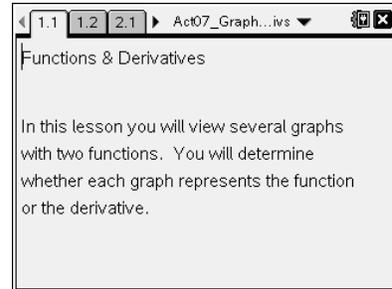
Student Activity

Name _____
Class _____

Open the TI-Nspire document *Graphical_Derivatives.tns*.

Objective: To recognize relationships between functions and their derivatives using graphs.

Directions: The TI-Nspire document has several function and derivative graphs on the same screen. Examine each graph with your partner and determine which graph represents the function or derivative.

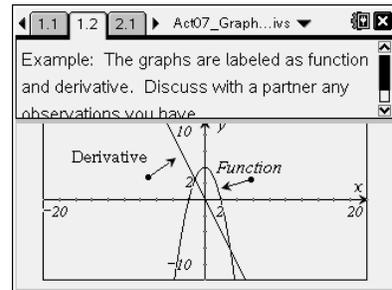


Move to page 1.2.

Press **(ctrl)** **▶** and **(ctrl)** **◀** to navigate through the lesson.

Problem 1: Work in pairs to discuss observations about the relationship between the graph labeled *derivative* and the graph labeled *function*.

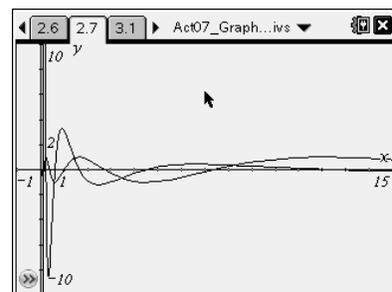
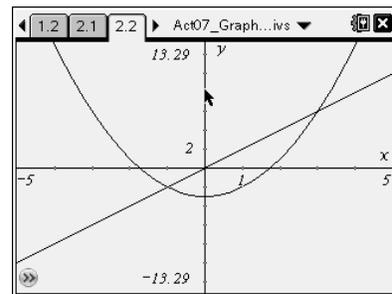
Be prepared to share your observations.



Move to page 2.1.

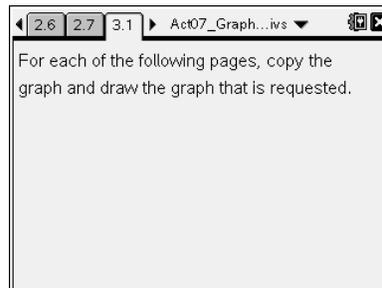
Work in pairs to determine which graph is the derivative or function for problems 2.2 to 2.7.

Determine which graph represents the derivative or the function.



Move to page 3.1.

This problem asks to draw a derivative or function graph for several displayed graphs using what you have learned from the previous problem.



Copy the graphs and draw the derivative or function for problems 3.2 to 3.6.
Compare results with your neighbor and discuss any differences in their graphs.

Class Discussion: For each problem, be prepared to discuss how you graphed the derivative or function.