

1. Our inquisitive eighth grade girl asks:

Why is slope defined as *rise over run* rather than *run over rise*?

Discuss with your group good answer(s).

2. Consider the graph of a continuous function,

$f(x)$, defined on

$0 \leq x \leq 7$. Nine points

on the graph are labeled

A through I . Using these

points as end points,

find all of the sections of the graph where $f(x)$ is:

(a) increasing

(b) decreasing

(c) concave up

(d) concave down

(e) At least some of the nine labeled points can be described as having important roles. For example, G is the global maximum of the function because the value of f at G is greater than any other value of f . See how many of the points your group can describe.

