

Math 111 Problem Flowchart

**TRANSLATE QUESTION TO ALL 3 LANGUAGES
(Graphical, English, and Functional Notation)**

**GIVEN TOTAL VALUES IN
A GRAPH OR TABLE
(such as TR/TC/DIST)**

**GIVEN INCREMENTAL OR RATE
VALUES
(such as MR/MC/AS or AR/AC/ATS)**

**DIAGONAL LINE
QUESTIONS
(such as AR/AC/ATS)**

**SECANT LINE
QUESTIONS
(such as MR/MC/AS)**

Make sure you understand what is given first. Does each point represent what is about to happen (over the next interval) or what previously happened (over the last interval)?

If the slope is given,
draw a reference line
and find the intersection.

If the slope is given,
draw a reference line.
then slide your ruler
parallel to an interval of
appropriate length.

Write down the definitions and formulas
for the quantities involved and
remember the big results from class.

**If you are asked to find
the slope,** draw the line
and use two points to get
the slope.

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the slope,** draw the line
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the slope.

By adding up the increments, try making
a table of total values.

**To visualize the slopes
of the diagonal lines,**
fix your ruler at the
origin and rotate the
ruler to various points
on the graph.

**To visualize the slopes of
the secant lines,** move
your ruler from one
interval to the next on the
graph and compare slopes.

Once you have done the steps above,
carefully read the question again. Read
off the necessary values from the table
or graph and answer the question.