

Issues with homework?

p66 #1, 3, 5, 6

Feb 20-12:23 PM

Sec 2.1 **Determining Average Rate of Change**

When travelling to Kenora, it takes me about 5 and a half hours to travel the 500 km.

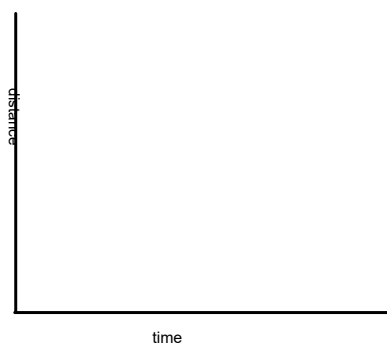
How fast am I driving?

Is this a reasonable answer for the whole trip?

What other factors do I need to consider?

Sep 21-10:43 AM

What would my trip look like if I graphed it?



Sep 21-10:45 AM

So there is a difference between rate of change at a particular time and average rate of change over a period of time.

IRC

ARC

Sep 21-10:47 AM

Read through EX 1 on p68

**Start a definition page for ch 2**  
**-average rate of change ARC**  
**-secant (include a diagram)**  
**-magnitude**

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The **average rate of change is really the** slope of the secant line joining any 2 points on a curve.

This ARC will be different on a curve depending on the 2 points which are chosen.

The ARC is constant on a line - the points chosen don't matter.

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### Equation for ARC

$$\frac{\Delta y}{\Delta x} = \frac{f(x_2) - f(x_1)}{x_2 - x_1}$$

Notice that this is really just a fancy formula for slope!

Sep 22-8:51 PM

#### Note:

Unit on rates of change are the units of the 2 quantities that are related to each other.

A positive ARC indicates an increase in the dependent variable over the given range.

A negative ARC indicates an decrease in the dependent variable over the given range.

Sep 22-9:03 PM

**Homework**

**p76 #1ace, 4, 7, 9, 12**

Sep 22-9:06 PM