Unit 5 Lesson 3 Slope as a Rate of Change Warm Up:
Determine the slope of the line given in the graph to the right.


## Unit 5 - Linear Relations I

Day 3 - Slope as a Rate of Change (5.4)
Recap: Slope formula -

Ex. 1 Sue drove 325 km in 3.5 hours.
What is the rate of change of distance from Sue's starting point?

Ex. 2 A 5 year old sleeps an average of 11 hours a night, whereas a 25 year old sleeps an average of 8 hours a night. What is the rate of change of hours.

Unit 5 Lesson 3 Slope as a Rate of Change
Ex. 3 The graph shows the relationship between the height of a parachutist, in metres, and the time of descent, in seconds.

a) Calculate the slope. (watch the scale)
b) Interpret the slope as a rate of change.

Ex. 4 Christina pays her internet bill based on hours of use. For one month, Christina was on-line for 15 hours and was billed for $\$ 23.75$. The next month, she was on for 27 hours and her bill was $\$ 38.75$. Assume this is a linear relationship. Determine the rate of change and interpret its meaning in the context of the question.

## Method 1:

a) Graph the cost per hour


## Method 2:

Determine the slope of the line using the two given points
b) Determine the slope of the line.

