NAME _____

Lesson 3.1 Understanding Slope

The **slope** of a line on a coordinate grid can be found by determining the **rate of change**.

Michael keeps track of the number of yards he mows for 5 days.

	Day 1	Day 2	Day 3	Day 4	Day 5
Number of Lawns	1	3	6	8	13
Amount Earned ($)	20	60	120	160	260

Find the slope, or rate of change, by dividing the rate of change for the dependent variable (amount earned) by the rate of change for the independent variable (number of lawns).

$$\frac{\text{change in money earned}}{\text{change in \# of lawns}} = \frac{60 - 20}{3 - 1} = \frac{40}{2} = 20 \qquad \frac{\text{change in money earned}}{\text{change in \# of lawns}} = \frac{260 - 160}{13 - 8} = \frac{100}{5} = 20$$

The rate of change, or slope, in this situation is 20 and is **constant**.

Find the slope, or rate of change for each situation. Be sure to show your work.

1. Students are buying tickets for the fall dance. The student council keeps track of how many tickets they sell in one week.

	Monday	Tuesday	Wednesday	Thursday	Friday
Number of Tickets Sold	10	15	23	28	32
Amount Earned ($)	50	75	115	140	160

The rate of change, or slope, for this situation is _____.

2. Jean planted a sunflower. She decided to measure how much it grew each week.

Time (weeks)	1	2	3	4
Height (cm)	16.2	20.4	24.6	28.8

The rate of change, or slope, for this situation is _____.