

hw # 21 - standard 11 - Rate of Change and Slope filled in

Name: _____ Show work needed to justify your answer. Date: _____

HW # 21: Algebra 1 - Standard 11 - Rate of Change and Slope

5 points

Find the rate of change of the function by using two points from the table.

1.

x	y
5	2
10	3
15	4
20	5

2.

x	y
1	15
2	9
3	3
4	-3

3. **POPULATION DENSITY** The table shows the population density for the state of Texas in various years. Find the average annual rate of change in the population density from 2000 to 2009.

Population Density	
Year	People Per Square Mile
1930	22.1
1960	36.4
1980	54.3
2000	79.6
2009	96.7

4. **BAND** In 2012, there were approximately 275 students in the Delaware High School band. In 2018, that number increased to 305. Find the annual rate of change in the number of students in the band.

5. **TEMPERATURE** The graph shows the temperature in a city during different hours of one day.

- Find the rate of change in temperature between 6 A.M. and 7 A.M. and describe its meaning in the context of the situation.
- Find the rate of change in temperature from 1 P.M. and 2 P.M. and describe its meaning in the context of the situation.

