VARIANCE & STANDARD DEVIATION

1-6: Determine the variance and standard deviation for each set of data

1. 1, 9, 9, 10, 11, 20

2. 3, 3, 4, 4, 5, 5

3. 1, 2, 3, 4, 5

4. 1, 2, 5, 8, 9

5. 4, 4, 5, 9, 10

6. 1, 1, 2, 2, 8, 10

7. Which of these three cities have the most consistent temperatures?
(hint: calculate the variance and standard deviation for each city)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
San Francisco	58°	61°	62°	65°	65°	68°	68°	69°	71°	70°	64°	59°
San Diego	66°	66°	66°	69°	69°	72°	76°	78°	77°	74°	70°	66°
Santa Clarita	64°	66°	68°	74°	79°	88°	94°	95°	91°	82°	72°	65°

8. A company that provides a vehicle for each of their eight employees, monitors the amount of gasoline used by each employee. The following list is the amount of gasoline, in litres, used by the employees. What is the variance and standard deviation.
42, 21, 38, 42, 63, 42, 26, 30

9. McDonald's monitors the amount of time, in minutes, that a customers waits for their order while going through the drive-thru. The boss tells the staff that their serving time is good if the standard deviation is under 4 minutes. How did they do if the following times were recorded?
5, 3, 2.5, 8, 15, 4, 4.5, 6.5, 2, 9

10. The following is a random selection of marks taken from two Algebra 2 classes. Which class has a lower variation of scores?
Section 1: 42, 56, 60, 62, 67, 90
Section 2: 45, 58, 61, 75, 87, 93