

The following data represents the temperature at 4 towns in Mathechusettes when lightning struck.

Numbersville					Realtown					Linesville					Maths Meadow							
95	97	88	86	92	94	66	68	75	77	66	74	58	55	58	57	54	86	72	73	78	81	80

1. Find the following values, rounding to the nearest tenth when necessary:

Numbersville	Realtown	Linesville	Maths Meadow
Mean:	Mean:	Mean:	Mean:
Median:	Median:	Median:	Median:
Range:	Range:	Range:	Range:
Standard Deviation:	Standard Deviation:	Standard Deviation:	Standard Deviation:

- a. Which town has the greatest range of temperature?
- b. What town has the least variation in temperature? Justify by talking about the standard deviation.

2. Find the value of x.

- a. 20, **x**, 77, 11, 43 ; The median is 43.
- b. 60, 75, 120, **x** ; The median is 75.5
- c. 13, **x**, 19, 20, 18, 17. The mean is 17.
- d. 37, 46, **x**, 63, 88 ; The mean is 50.
- e. 12, 19, 20, 24, **x** . The mean is 22.
- f. 30, 90, 60, 50, 120, **x** ; The median is 65

Answers:

	Numbersville	Realtown	Linesville	Maths Meadow
1.	Mean: 92 Median: 93 Range: 11 Standard Deviation: 4.2	Mean: 71 Median: 71 Range: 11 Standard Deviation: 4.9	Mean: 56.4 Median: 57 Range: 4 Standard Deviation: 1.8	Mean: 78.3 Median: 79 Range: 14 Standard Deviation: 5.2

- a. **Maths Meadow** has the greatest range in temperature.
- b. **Linesville** had the least variation in temperature because the standard deviation is the lowest at 1.8.

2. a. x can be any number between (and including) 43 and 77 b. x = 76 c. x = 15 d. x = 16 e. x = 35 f. x = 70