PAP Weekly Project 1.1

Mean Absolute Deviation

The following data lists each month and the corresponding average monthly temperature for a particular city. Analyze the data below by finding the mean and mean absolute deviation of each city. SHOW YOUR WORK on a separate sheet of paper and staple to this paper.

City 1

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temp. (°F)	−10	−4	11	32	49	60	62	56	45	24	2	−6

Mean = _____

M.A.D. = _____

City 2

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temp. (°F)	72	72	73	75	76	78	80	80	79	78	76	73

Mean = _____

M.A.D. = _____

City 3

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temp. (°F)	54	58	63	70	79	89	93	91	86	75	62	54

Mean = _____

M.A.D. = _____

Assign each city a color. Plot each 12 average monthly temperature points on the line plot next to their city number. Use a carat (^) to mark the mean.

KEY

□ City 1

□ City 2

□ City 3

^ Mean

City 1
```
-10  0  10  20  30  40  50  60  70  80  90  100 110
```

City 2
```
-10  0  10  20  30  40  50  60  70  80  90  100 110
```
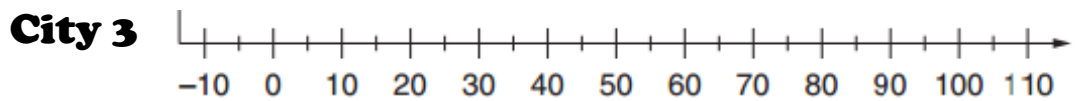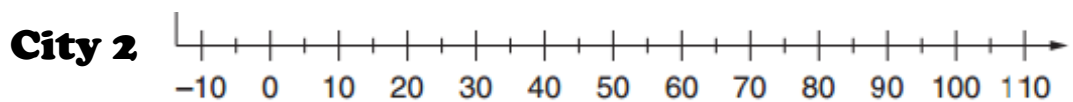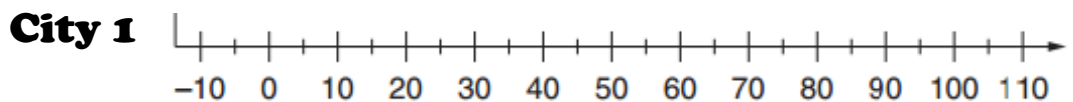
City 3
```
-10  0  10  20  30  40  50  60  70  80  90  100 110
```
Temperature (°F)

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The three cities represented on the graphs are Chicago, Illinois; Fairbanks, Alaska; and Phoenix, Arizona. Use the data to predict which data set comes from which city. Use the measures of spread to justify your decisions.

I think City 1 is _____ because _____

_____

I think City 2 is _____ because _____

_____

I think City 3 is _____ because _____

_____

Formulating Equations and Inequalities

Write two real-world problems using the same values and operations to solve. One problem should be represented by a two-step equation, the second should be represented by a two-step inequality. Record the equation and inequality that represent each problem, and then graph the solutions on the number lines.

Equation Word Problem	Inequality Word Problem
Equation	Inequality
Graph ⟷	Graph ⟷