

Name	Math score (%)
Albert	46
Beth	29
Cindy	35
David	93
Emily	37
Frank	38
Gary	45
Helen	44
Ida	46
Jeremy	31

Bellwork:  
The table gives the math scores of ten friends,

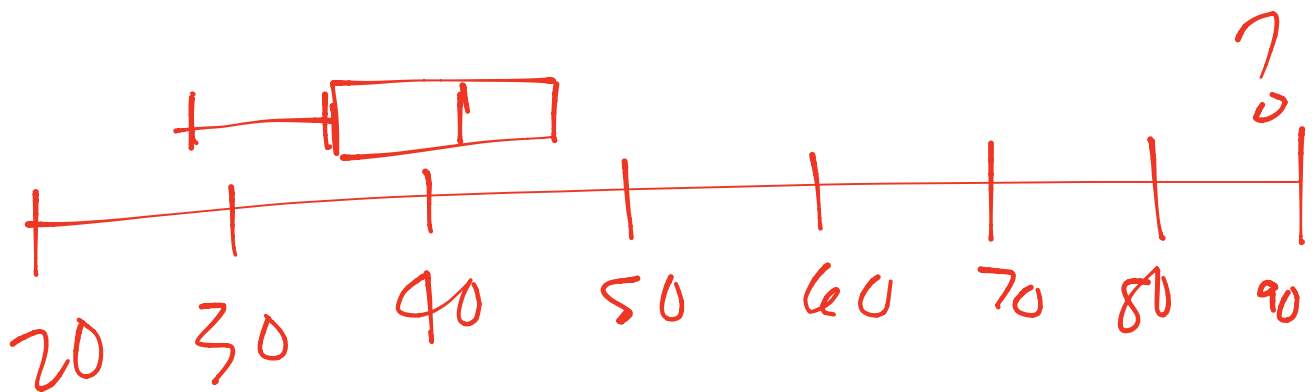
Analyze the data. Include a box plot. Check for outliers.

Remind : → Remind



29, 31, 35, 37, 38, 44, 45, 46, 46, 49

min 29     $Q_1$  35    Med = 41     $Q_3$  46     $n$  10



$$1.5(Q_3 - Q_1)$$

$$1.5(11) = 16.5$$

$$Q_3 + 16.5 = 62.5 \rightarrow \text{upper limit for outliers}$$

$$Q_1 - 16.5 = 18.5 \text{ lower limit for outliers}$$

$\bar{x}$  including 93 = 44.4

$\bar{x}$  not including 93: 39

med not incl. 93: 38

med incl. 93 is 41

Data Set:

1, 2, 3, 4, 5

$$\bar{x} = 3$$

$\frac{x_i - \bar{x}}{}$	$\frac{(x_i - \bar{x})^2}{}$
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-2

4

-1

1

0

0

1

1

2

4

$$\sum (x_i - \bar{x})^2$$

10

$\frac{10}{n-1}$

$$= \frac{10}{4}$$

$$s^2 = 2.5$$

$$s = \sqrt{2.5}$$

$$s = 1.58$$