

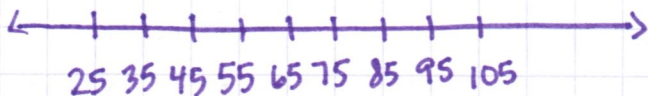
11-6 box-and-whisker Plots ANS KEY

HW: # 2-7, 10-18, 21-25, 28-29

- ② min = 25
 $Q_1 = 50$
 median = 85
 $Q_3 = 90$
 max = 100

IQR = 40 $40 \times 1.5 = 60$
 $50 - 60 = -10$
 $90 + 60 = 150$ > no outliers

Test scores

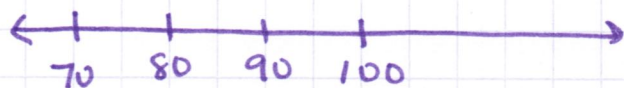


- ⑦ min = 72
 $Q_1 = 73$
 med = 80
 $Q_3 = 85$
 max = 95

IQR = 12 $12 \times 1.5 = 18$

$73 - 18 = 55$
 $85 + 18 = 103$ > no outliers

of mile btwn rest stops on Hwy



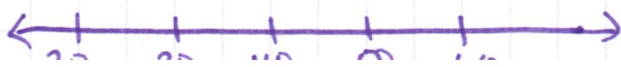
- ③ $200 - 125 = 75$
 ④ at least 125
 ⑤ National - median is higher

- ⑥ min = 26
 $Q_1 = 32$
 med = 38
 $Q_3 = 51$
 max = 55

IQR = 19 $19 \times 1.5 = 28.5$

no outliers
 $32 - 28.5$
 $51 + 28.5$

Ages of people in line for



- ⑩ 75%
 ⑪ data is very spread out meaning large difference in the population.

- ⑫ 2 outliers
 ⑬ Top half is more spread out than bottom half. Most major zoo's are considerably smaller in area than few zoos with larger area.

- ⑭ steel
 ⑮ none
 ⑯ 25%
 ⑰ 75%

- ⑱ Faster: 100% of steel R.C. travel faster than Wood R.C.

(21) 100%

(22) The box and whisker for SE & S central cities would not change
The N.E. & Midwest cities box and whisker would change to include the outlier 98

(23) Overall there seems to be more sunny days in the SE/SC cities. The median number of days is higher for SE/SC cities. They also have a greater spread (larger range).

(24) sample: 5, 6, 7, 8, 8, 8, 9, 10, 11, 12, 12

(25) IQR = $98 - 89$

$$9 \times 1.5 = 13.5$$

$$89 - 13.5 = 75.5$$

72 is less than this
so it is an outlier

Chance is correct

(28) A

(29) J