

Third Six Weeks Test Review: Answer Key

Data and Statistics Review

Name: _____

1) What is the median of the data represented by the dot plot?

- (A) 21
- (B) 21.5
- (C) 22
- (D) 25

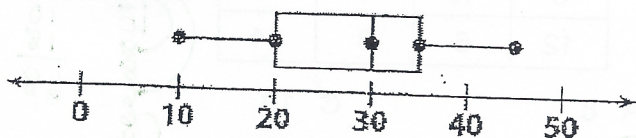


2) Over 6 days, Dan jogged 7.5 miles, 6 miles, 3 miles, 3 miles, 5.5 miles, and 5 miles. What is the mean distance that Dan jogged?

- (A) 3 miles
- (B) 5 miles
- (C) 5.25 miles
- (D) 7.5 miles

$$\begin{array}{r} 7.5 \\ 6 \\ 3 \\ 3 \\ 5.5 \\ 5 \\ \hline 30.0 \end{array} \quad \begin{array}{r} 6 \overline{)30} \end{array}$$

3) Use the box plot below to find the 5 values listed.



Min 10 Q1 20 Median 30 IQR 15 = 35 - 20
 Q3 35 Max 45 RANGE 35 = 45 - 10

4) THE DATA SHOWS THE AGES OF THE STARTERS ON TWO PROFESSIONAL BASKETBALL TEAMS. CREATE A BOX-PLOT.

MAVS	28	24	37	19	21
ROCKETS	34	29	21	27	31

19	21	24	28	37
21	27	29	31	34

FIND THE RANGE OF AGES FOR EACH TEAM!

MAVS RANGE = $37 - 19 = 18$ ROCKETS RANGE = $34 - 21 = 13$

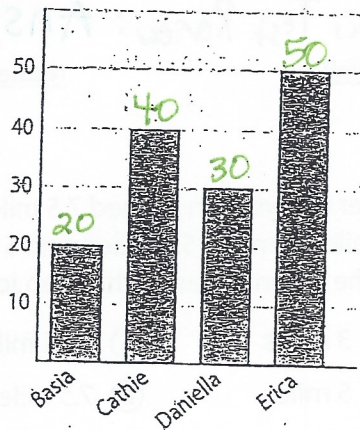
FIND THE IQR FOR EACH TEAM!

MAVS IQR = $32.5 - 20 = 12.5$ ROCKETS IQR = $32.5 - 24 = 8.5$

$Q_3 = 28 + 37 = 65$
 $65 \div 2 = 32.5$
 $Q_1 = 20$

$Q_3 = 31 + 34 = 65 \div 2 = 32.5$
 $Q_1 = 21 + 27 = 48 \div 2 = 24$

5 Use the graph



The bar graph shows the number of points scored by four players in a basketball game. 20, 30, 40, 50

What is the range of the data?

$50 - 20 =$

- A 10 points
- B 20 points
- C 30 points
- D 40 points

How many more points did Cathie score than Basia? $40 - 20 = 20$

- A 5 points
- B 10 points
- C 15 points
- D 20 points

6

What is the range for the data shown in the stem-and-leaf plot below?

Stem	Leaves
7	2 2 3 3 4
8	1 1 2 8
9	0 1 2 5 5
10	0

$100 - 72 = 28$

Key: 8 | 1 means 81

- A 28
- B 72
- C 82
- D 100

7

What is the mean for the data set below?

8	10	6	4
12	6	8	14

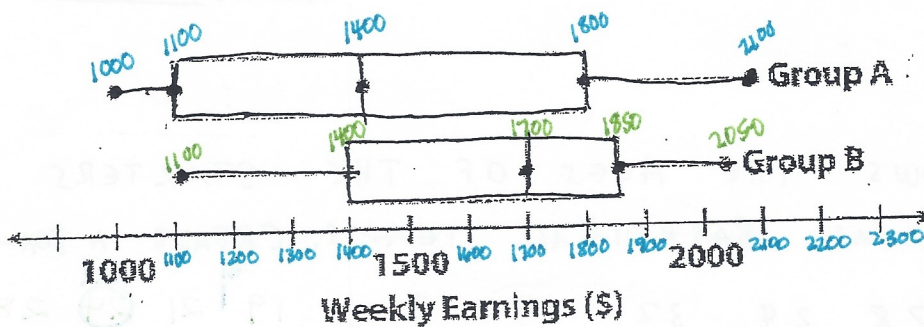
- A 8
- B 8.5
- C 10
- D 12

Handwritten calculations for the mean:

$$\frac{8 + 10 + 6 + 4 + 12 + 6 + 8 + 14}{8} = \frac{68}{8} = 8.5$$

8

The box plots compare the weekly earnings of two groups of salespeople from different clothing stores.



a. Calculate the IQR for each group.

Group A = $1800 - 1100 = 700$

Group B = $1850 - 1400 = 450$

b. Calculate the range for each group.

Group A = $2100 - 1000 = 1100$

Group B = $2050 - 1100 = 950$

c. Which group has a larger spread of earnings?

Group A has a larger spread