U9 Data Analysis Review

Name:

1. Find the mean, median, range, and mode for Ms. Jansen's previous Target purchases.

$150, $100, $240, $220, $195, $225

Mean: _____ Median: _____

Mode: _____ Range: _____

2. Now, Ms. Jansen goes to Target and buys a new T.V. for $350. What is her new mean and median?

Mean: _____ Median: _____

3. A pollster asks 20 people how many hours they sleep each night. Use the data below to draw each display.

5, 7, 9, 5, 3, 6, 8, 6, 5, 7, 6, 8, 7, 7, 6, 5, 4, 4, 5, 6

Frequency Table

Histogram

Line Plot

Stem-and-Leaf Plot

4. Researchers know that there are 53 marked wolves in an area. On a flight over the area, they count 18 marked wolves out of a total of 125 wolves. Estimate the total wolf population.

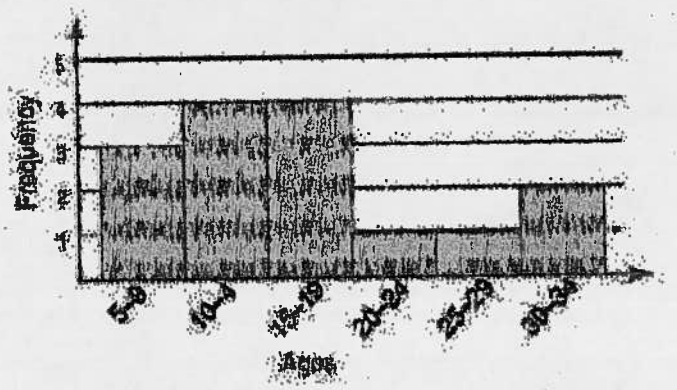
5. A salesperson tracks how many cases of pop he sells each day. The data is listed below.

Day	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
	160	140	206	110	?	120	80

If the salesperson sells 262 cases of pop on Friday, how will that affect the mean and the median?

Mean: _____ Median: _____

Use the histogram below for questions 6-8.

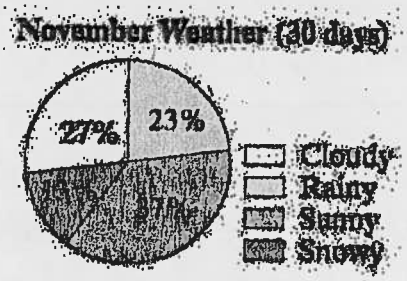


6. How many students are between the ages of 20 and 29?

7. What is the range of the data in the histogram above?

8. How many students were surveyed, using the histogram above.

Use the circle graph below for questions 9-11.



9. What type of weather occurred the fewest times in November?

10. How many days in November were cloudy?

11. How many days were rainy or snowy?

12. Gina's test scores are 95, 82, 76, and 88. What score must she get on the fifth test in order to achieve an average of 84 on all five tests?

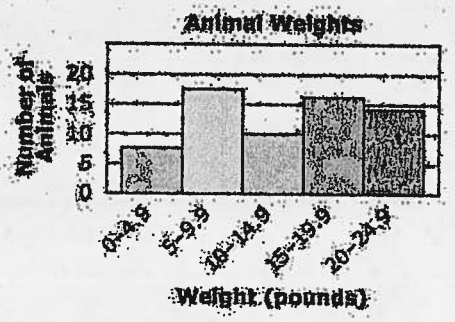
13. Charlie's scores for eight assignments are given:

21 27 31 23 28 18 23 *x*

If the median for his scores is 25, what is the possible value for x?

A. 23 B. 25 C. 28 D. 26

14. A veterinarian recorded the weights of animals in a histogram.



Which question can be answered using the information from the histogram?

A. How many animals weigh 4.9 pounds?
B. How many animals weigh between 5 and 10 pounds?
C. How many animals weigh less than 8 pounds?
D. How many animals weigh at least 15 pounds?

15.

The price, in cents, of each item in a vending machine is shown in the stem-and-leaf plot below.

Prices of Items in Vending Machine

3	0 5
4	0 0 0 5
5	0 0 5 5 5
6	0 5
7	5 5 5 5
8	0
9	5

Key
3 | 5 represents 35 cents

What is the range of the prices of the items?

A. 55 cents
B. 60 cents
C. 65 cents
D. 75 cents

16. Mr. J made a frequency table of the scores his students got on a test.

Score	Frequency
Below 75	4
76-80	14
81-85	2
86-90	8
91-95	5
96-100	1

How many students got a score that was more than 85?

A. 14 B. 13 C. 17 D. None of the above

U9 Data Analysis Review Answers

1. Mean: 100+150+195+220+225+240 = 1130 ÷ 6 = **$188.33**
   Median: 195+220 = 415 ÷ 2 = **$207.50**
   Mode: **None**
   Range: 240 − 100 = **$140**
   100, 150, **195, 220**, 225, 240

2. Mean: 1130+350 = 1480 ÷ 7 = **$211.43**
   Median: **$220**
   ~~Mode~~: 100, 150, 195, **220** 225, 240, 350
   ~~Rang~~

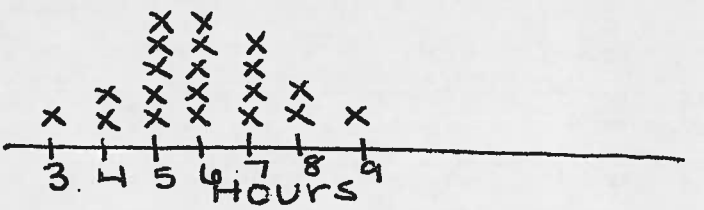
3. **Frequency Table**

   Number of Hours of Sleep

Hours	Tally	Frequency
3	I	1
4	II	2
5	𝍸	5
6	𝍸	5
7	IIII	4
8	II	2
9	I	1

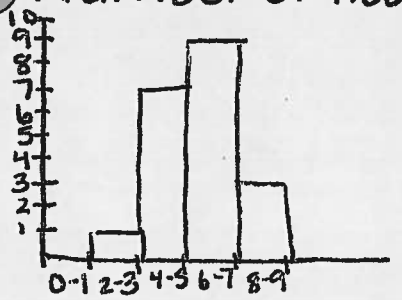
Line Plot

Number of Hours People Slee



Histogram

Number of Hours of Sleep



Stem-and-Leaf Plot

Number of Hours of Sleep

0	3 4 4 5 5 5 5 6 6 6 6 6 7 7 7 7 8 8 9
1	
2	

Key: 0|5 means 5 hours

4. $\frac{18}{125} = \frac{53}{x}$ $\frac{18x}{18} = \frac{6625}{18}$ **about 368 wolves**

5. original mean: 160+140+206+110+120+80 = 816 ÷ 6 = **136 cases**
   new mean: 816+262 = 1078 ÷ 7 = **154 cases** mean increased because of the outlier

   original median: $ **130 cases**
   new median: **140 cases** median also increased

   80, 110, 120, 140, 160, 206, 262
   ↑ orig med. ↑ new med.

6. 2 students
7. 34 − 5 = 29 years
8. 3+4+4+1+1+2 = 15 students

9. snowy (13%)

10. .27(30) = about 8 days (8.1 exactly)

11. 23 + 13 = 36% .36(30) = about 11 days (10.8 exactly)

12. 79 points

① 84 · 5 = 420
avg. # of tests = pts needed

② 95 + 82 + 76 + 88 = 341
pts. earned so far

③ 420 − 341 = 79 pts

13. C → 28

18, 21, 23, 23, ~~25~~ 27, 28, 31

nothing can be added here

if 26 was added...
$\frac{23+26}{2} = \frac{49}{2} = 24.5$

if 28 was added...
$\frac{23+27}{2} = \frac{50}{2} = 25$

14. D

15. C .95 − .30 = .65

16. A 8 + 5 + 1 = 14 students