

Statistics

Sept 24

Measures of Central Tendency:

mean: average add all the number together & divide by how many numbers there are

median: the middle number when the numbers are arranged in order
If there is an even set of data, find the average of the middle two.

mode: occurs most often

Range: the difference between
+ the lowest

1. most requested song: mode
2. marks 12, 80, 82, 84, 87 median
3. most popular cap size mode
4. mass of an adult elephant mean
5. typical salary at a company median
6. your bowling ability mean

7. mean, median, mode and range

21, 25, 27, 26, 25

$$\text{mean} = 124 \div 5 = 24.8$$

median = 21, 25, (25), 26, 27

mode = 25

range = 6

9. 8, 16, 28, 41, 16, 11, 8

Mean: $128 \div 7 = 18.3$

Median: 8, 8, 11, 16, 16, 28, 41

Mode: 8, 16

Range: 33

13. 18, 18, 25, 19, 27, 18, 25, 19
22, 27

$$\text{Mean: } 218 \div 10 = 21.8$$

$$\frac{19+22}{2} = 20.5$$

Median: 18, 18, 18, 19, 19
22, 25, 25, 27, 27

Mode: 18

Range: 9

14. 145, 145, 168, 170, 174, 182

Mode: 145 not a good choice

Median: $(168 + 170) \div 2 = 169$

19. a) the mode must be on the list
two or more times

b) the median could be a decimal
number

c) the mean is not necessarily
one of the numbers on the list

d) mean, median + mode could all be different

Circle Graphs

 23%

Two biggest categories
are too dry (28%)
↓ too rocky (23%)

3. Type of Waste	Percent	Degrees
Paper	40	$\times 3.6 = 144^\circ$
Yard Waste	18	$\times 3.6 = 64.8^\circ$
Food Waste	12	$\times 3.6 = 43.2^\circ$
Glass	8	$\times 3.6 = 28.8^\circ$
Plastic	7	$\times 3.6 = 25.2^\circ$
Steel	7	$\times 3.6 = 25.2^\circ$
Other	8	$\times 3.6 = 28.8^\circ$
	100	360°

Hwk: Statistics 185-186

+ circle graph

Review
p. 156

31-65

question on
the back #4

$$\frac{36}{400} = 0.09 \times 100 = 9\%$$

Test: Friday

