Statistics /
Module 3 - Constructing Graphical Presentations

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Topic 1: Constructing a frequency distribution for non-grouped data

Tom's Electronics offers five models of cell phones (A, B, C, D, and E).
Yesterday they sold 21 cell phones.

(a) The models that were sold appear below.
Complete the frequency distribution for the data.

Model
A C C A D B D
B D D C E D E
E A C D A B C

Model	Frequency
A	4
B	3
C	5
D	6
E	3

+ 21 total

(b) There are four major phone plans available for these cell phone models.
But not every plan is available for every model.
The table below shows the plans available for the cell phone models.

Phone plan	Model
Horizon	D
Clear1	C and E
Max Data	B, C, and D
City Fone	A and E

5 + 3 = 8

How many cell phones sold at Tom's Electronics yesterday can use the Clear1 plan?

☐ phones

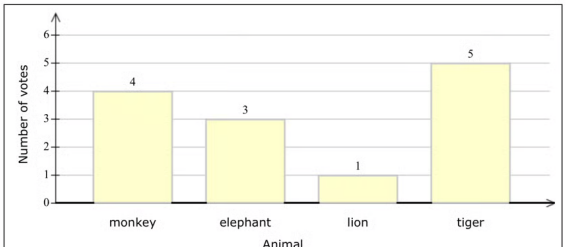
Topic 2: Representing data on a bar graph

Mr. Johnson took 13 students on a field trip to the zoo. The students were asked to vote on their favorite animals. This is how they voted.

tiger	lion	tiger	tiger	elephant
tiger	monkey	tiger	elephant	monkey
monkey	elephant	monkey		

4 + 3 + 1 + 5 = 13

Draw the bar graph for these data.
Note: You can click on the names of the animals above to help keep track of which ones have been used.



Topic 3: Constructing a frequency distribution and a histogram

Topic 4: Constructing a relative frequency distribution for grouped data

There are 19 students in a certain painting class. Their ages are shown below.

Complete the grouped relative frequency distribution for the data. (Note that we are using a class width of 6.)

Write each relative frequency as a decimal rounded to the nearest hundredth, not as a percentage.

Age
24 27 32 36 35
33 15 28 22 34
29 20 38 25 21
38 36 30 19

Age	Relative frequency
15 to 20	3/19 = 0.16
21 to 26	4/19 = 0.21
27 to 32	5/19 = 0.26
33 to 38	7/19 = 0.37

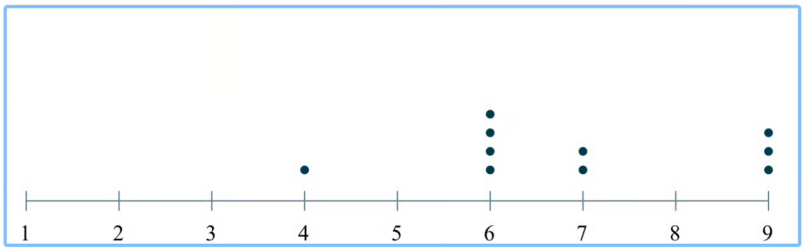
percentage

0.16
0.21
0.26
0.37
1.00

Topic 5: Representing data on a dot plot

Draw a dot plot for these numbers. (A dot plot is sometimes called a "line plot".)

6, 9, 7, 9, 6, 7, 9, 4, 6, 6



Topic 7: Constructing a percent bar graph

A zoo has some new exhibits.
In a survey, 3200 zoo attendees are asked to choose their favorite.
The results are shown in the following table.

(a) Find the percentage for each type of animal.

Type of animal	Number of zoo attendees	Percentage
Elephant	1152	36%
Panda	256	8%
Tiger	480	15%
Bonobo	1312	41%

Elephant 1152/3200 = 0.36 = 36%
Panda 256/3200 = 0.08 = 8%
Tiger 480/3200 = 0.15 = 15%
Bonobo 1312/3200 = 0.41 = 41%

(b) Construct a percent bar graph for the data.