

Name: _____

Date: _____

Choosing Data Display Algebra (Grade 8)

Key Idea

Data Display

Pictograph

What does it do?

shows data using pictures



Bar Graph

shows data in specific categories



Circle Graph

shows data as parts of a whole



Line Graph

shows how data change over time



Histogram

shows frequencies of data values in intervals of the same size



Stem-and-Leaf Plot

orders numerical data and shows how they are distributed



Box-and-Whisker Plot

shows the variability of a data set by using quartiles



Dot Plot

shows the number of times each value occurs in a data set



Scatter Plot

shows the relationship between two data sets by using ordered pairs in a coordinate plane



Exercise #1:

Choose an appropriate data display for the situation. Explain your reasoning.

- the number of students in a marching band each year
- a comparison of people's shoe sizes and their heights

Exercise #2:

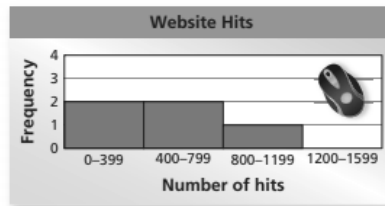
Choose an appropriate data display for the situation. Explain your reasoning.

1. the population of the United States divided into age groups
2. the percents of students in your school who play basketball, football, soccer, or lacrosse

Exercise #3:

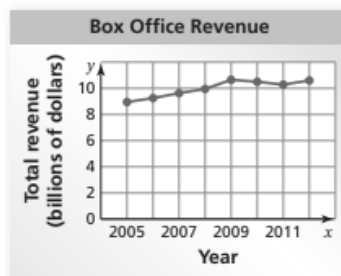
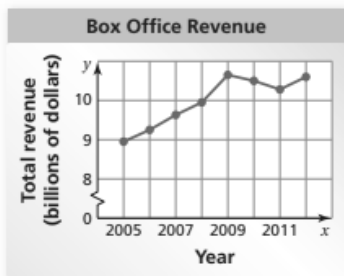
You record the number of hits for your school's new website for 5 months. Tell whether the data display is appropriate for representing how the number of hits changed during the 5 months. Explain your reasoning.

Month	Hits
August	250
September	320
October	485
November	650
December	925



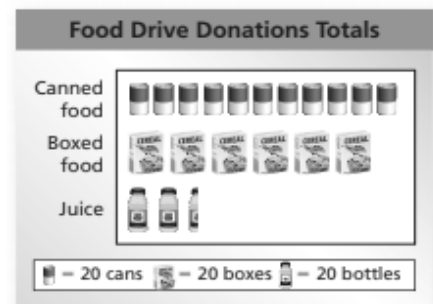
Exercise #4:

Which line graph is misleading? Explain.



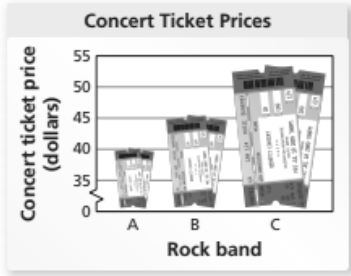
Exercise #5:

A volunteer concludes that the numbers of cans of food and boxes of food donated were about the same. Is this conclusion accurate? Explain.



Exercise #6:

Explain why the data display is misleading.



Exercise #7:

Analyze and display the data in a way that best describes the data. Explain your choice of display.

192 red	170 green	203 black	183 pink	230 blue
165 yellow	210 purple	250 orange	179 white	218 other

Exercise #8:

Choose an appropriate data display for the situation. Explain your reasoning.

- a student's test scores and how the scores are spread out
- the distance a person drives each month
- the outcome of rolling a number cube
- homework problems assigned each day

Exercise #9:

LIFEGUARD The table shows how many hours you worked as a lifeguard from May to August. Tell whether the data display is appropriate for representing how the number of hours worked changed during the 4 months. Explain your reasoning.

Month	Hours Worked
May	40
June	80
July	160
August	120

