




Name: \_\_\_\_\_

# Grade 6

## DATA MANAGEMENT & PROBABILITY: ANALYZING DATA

Don't forget to try the *Mode, median and mean* activity first! Go to [mathfrog.ca](http://mathfrog.ca) for the link.

A **bar graph** is best for comparing different items.

A **circle graph** is best for comparing parts of a whole or percentages.

A **line graph** is best for showing changes over time.

1. Last year, "The Sneaker Store" kept track of the number of pairs of shoes it sold.

a) Use the data below to complete the line graph

Month	Pairs of Shoes Sold
January	700
February	600
March	400
April	200
May	400
June	400
July	500
August	900
September	700
October	600
November	800
December	1000
<b>Total</b>	<b>7200</b>



b) Calculate the mean number of pairs of shoes sold per month.

\_\_\_\_\_

c) What is the mode?

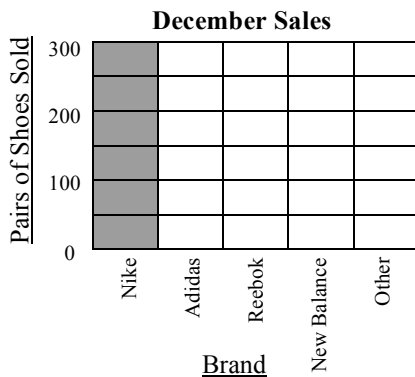
\_\_\_\_\_

d) What is the median?

\_\_\_\_\_

e) In December, the store also recorded the brand of each pair of shoes it sold. Complete the bar graph at the right.

Brand	Pairs of Shoes Sold
Nike	300
Adidas	250
Reebok	200
New Balance	150
Other	100




**Did You Know?**

The largest feet in the world are US size 28.5.

They belong to a Florida man named Matthew McGrory.

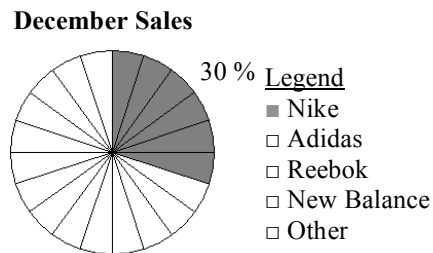
His shoes cost \$22,745.



<http://www.guinnessworldrecords.com>

f) Fill in the chart below and use the information to complete the circle graph at the right.

Brand	Pairs of Shoes Sold	Fraction	Decimal	Percent
Nike	300	$\frac{300}{1000}$	0.30	30 %
Adidas	250			
Reebok	200			
New Balance	150			
Other	100			



2. The value of the Canadian dollar compared to the US dollar changes over time. The chart below shows the average value of one Canadian dollar in terms of US cents from 1998 to 2004.

Year	Average Value of Canadian Dollar
1998	68 ¢
1999	66 ¢
2000	67 ¢
2001	66 ¢
2002	64 ¢
2003	71 ¢
2004	73 ¢

- a) What is the mode? \_\_\_\_\_
- b) What is the median? \_\_\_\_\_
- c) Complete the two line graphs below.



- d) What is different about the two graphs?

\_\_\_\_\_

\_\_\_\_\_

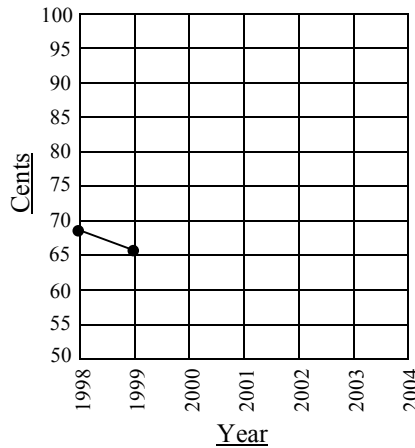
- e) Do you prefer the graph on the left or the graph on the right? Why?

\_\_\_\_\_

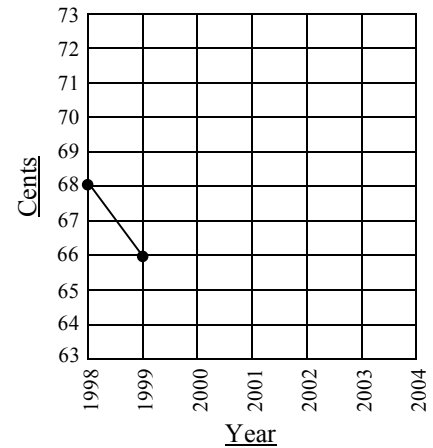
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\_\_\_\_\_

**Average Value of Canadian Dollar**



**Average Value of Canadian Dollar**



- f) How many US dollars will \$100 Canadian purchase today? \_\_\_\_\_



(www.xe.com)

## TRY THIS!

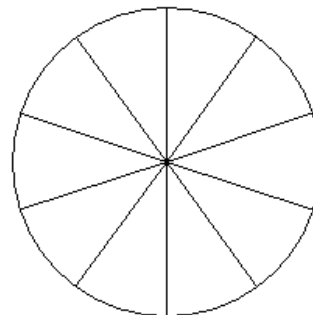
The chart below shows the area of each continent as a percent of the world's total area.

Continent	Area
Asia	30 %
Africa	25 %
North America	20 %
South America	15 %
Europe	5 %
Australia	5 %

- a) Use the data to draw a circle graph.



(title)



Legend

- Asia
- Africa
- North America
- South America
- Europe
- Australia

- b) If the world has 130,000,000 km<sup>2</sup> of land, calculate the actual area of each continent.

Asia \_\_\_\_\_ km<sup>2</sup>    North America \_\_\_\_\_ km<sup>2</sup>    Europe \_\_\_\_\_ km<sup>2</sup>  
 Africa \_\_\_\_\_ km<sup>2</sup>    South America \_\_\_\_\_ km<sup>2</sup>    Australia \_\_\_\_\_ km<sup>2</sup>