

UNIT 7 Data Management

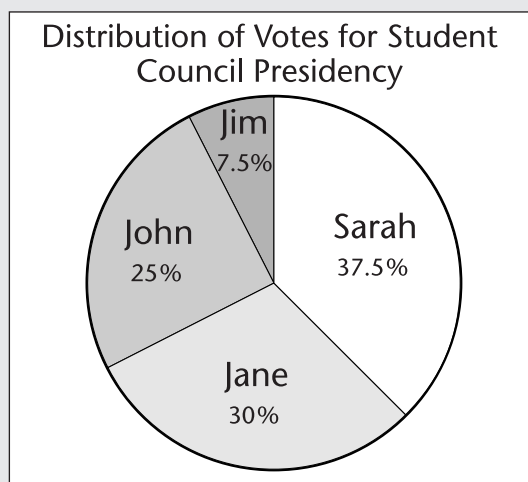
EXAMPLE

40 Grade 8 students were surveyed to determine which of the 4 candidates would most likely be elected President of the Student Council. The results were as follows:

Candidate	Sarah	Jane	John	Jim
No. of Votes	15	12	10	3

- a. Set up a table for a circle graph to represent the data. b. Draw a circle graph to show the data.

Candidate	Percentage of Votes	Angle of Sector
Sarah	$\frac{15}{40} \times 100\%$ = 37.5%	$360^\circ \times 37.5\%$ = 135°
Jane	$\frac{12}{40} \times 100\%$ = 30%	$360^\circ \times 30\%$ = 108°
John	$\frac{10}{40} \times 100\%$ = 25%	$360^\circ \times 25\%$ = 90°
Jim	$\frac{3}{40} \times 100\%$ = 7.5%	$360^\circ \times 7.5\%$ = 27°



Draw the graphs. Solve the problems.

- ① The table below shows the percentages of family income spent on different categories in Canada in 1995.

- a. Complete the table and draw a circle graph to represent the data.

Category	Percentage	Angle of Sector
Housing	25%	
Tax	20%	
Food	12%	
Transportation	12%	
Recreation	12%	
Savings, etc.	19%	



b. What other types of graphs could be used to represent this data?

Answer : _____

c. If a bar graph is drawn and tax is represented by a bar 5 cm high, what is the height of the bar representing housing? Do the bars have the same width?

Answer : _____

d. If a typical family spends \$7200.00 annually on transportation, what is the annual family income?

Answer : _____

e. If the Smith family are a typical family earning \$52 000.00 annually, how much would they spend on housing?

Answer : _____

f. If this graph is drawn for a very rich family, what differences would you expect to find?

Answer : _____

② Draw an appropriate graph to show the total number of deaths in some of the countries in the First World War.

Country	No. of Deaths in the First World War (in millions)
Russia	2.1
Germany	1.8
France	1.2
Austro-Hungary	1.1
British Empire	0.9
Turkey	0.6
Italy	0.5
U.S.A.	0.1

