

1) BEDMAS: $30 - 15 \times 2$

2) 10 % of 38

3) 50% of 24

4) Estimate the area of the circle if the diameter is 8 m:

5) $\frac{1}{3}$ of 15

6) 20% of 15

7) Estimate the Circumference of the circle if the radius is 5 cm:

8) 14×20

9) $802 \div 2$

10) What is the LCD for 12 and 3 ?



Example

All the students in two Grade 7 classes were asked how they get to school each day. Here are the results: 9 rode their bikes, 11 walked, 17 rode the bus, and 13 were driven by car. Construct a circle graph to illustrate these data.

A Solution

- For each type of transport:
Write the number of students as a fraction of 50, the total number of students.
Then write each fraction as a decimal and as a percent.

$$\text{Bike: } \frac{9}{50} = \frac{18}{100} = 0.18 = 18\% \quad \text{Walk: } \frac{11}{50} = \frac{22}{100} = 0.22 = 22\%$$

$$\text{Bus: } \frac{17}{50} = \frac{34}{100} = 0.34 = 34\% \quad \text{Car: } \frac{13}{50} = \frac{26}{100} = 0.26 = 26\%$$

The circle represents all the types of transport.

To check, add the percents.

The sum should be 100%.

$$18\% + 22\% + 34\% + 26\% = 100\%$$



Another Strategy

We could use a percent circle to graph these data.

- To find the sector angle for each type of transport, multiply each decimal by 360° .

Write each angle to the nearest degree, when necessary.

Bike 18%: $0.18 \times 360^\circ = 64.8^\circ \doteq 65^\circ$

Walk 22%: $0.22 \times 360^\circ = 79.2^\circ \doteq 79^\circ$

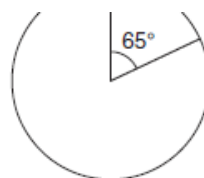
Bus 34%: $0.34 \times 360^\circ = 122.4^\circ \doteq 122^\circ$

Car 26%: $0.26 \times 360^\circ = 93.6^\circ \doteq 94^\circ$

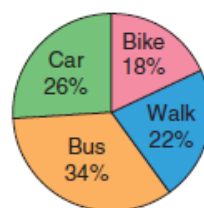
Bang!

3 out of 6

- Construct a circle.
 - Use a protractor to construct each sector angle.
 - Start with the smallest angle.
 - Draw a radius. Measure 65° .
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- Start the next sector where the previous sector finished.
 - Label each sector with its name and percent.
 - Write a title for the graph.



How Students Get to School



- 17.** This table shows the approximate chemical and mineral composition of the human body.

Component	Percent
Water	62
Protein	17
Fat	15
Nitrogen	3
Calcium	2
Other	1

- a) Draw a circle graph to display these data.

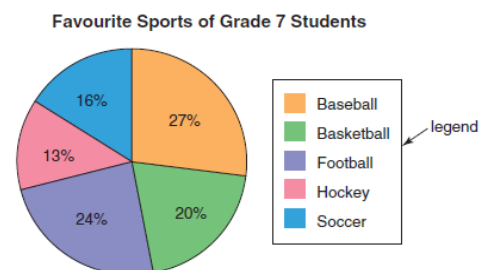
You are going to ask your question to your classmates.

Your information has to be presented in a circle graph.

You can use the percent circle from me OR create your own.

***Remember to include:

- 1) a title
- 2) the sectors (with color)
- 3) label your graph
- 4) have a legend
- 5) Show ALL of your work!



This is due: Tuesday, April 11, 2017

Favourite Sports of Grade 7 Students

