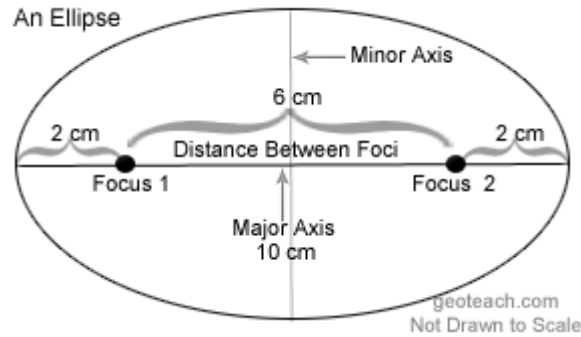


Name: _____ Date: _____ Class: _____

Ellipses and Eccentricity Computation Assignment

You will practice computing the eccentricity of ellipses using data given in a table. The following illustrations show the important labels for an ellipse.



This is the equation for Eccentricity:

Eccentricity of an ellipse
$$\text{eccentricity} = \frac{\text{distance between foci}}{\text{length of major axis}}$$

Important: An ellipse will always have a **decimal** assigned to it and **No Units!** You will only achieve this by dividing the larger number into the smaller number. When using a calculator, be sure to put the top (larger) number into the calculator first, then the division sign, then the smaller number, then "=".

Directions: Compute Eccentricity in the data below. Round to the nearest thousandths place (3 numbers to the right of the decimal). Be sure to include a zero place holder to the left of the decimal.
Example: Eccentricity = 0.223
 Show your work!

Eccentricity Computation

Ellipse	Major Axis	Distance Between Foci	Your Work	Eccentricity
1	30 cm	5 cm		
2	30 cm	10 cm		

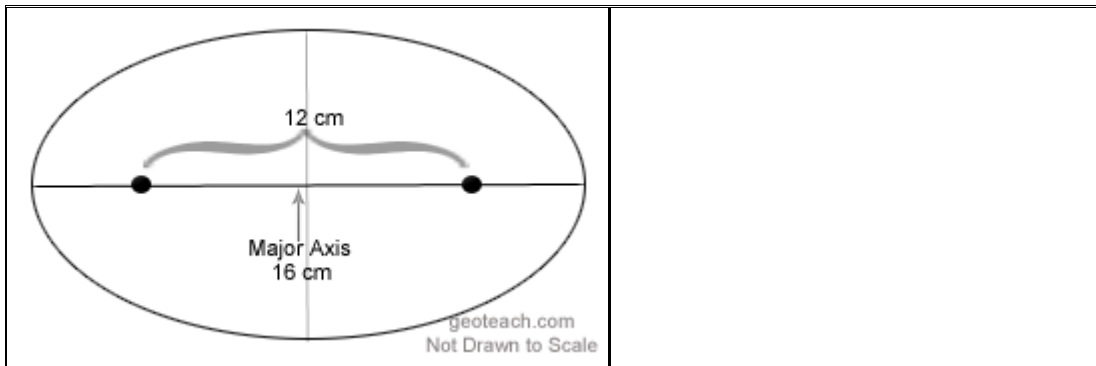
3	44 cm	9 cm		
4	25 cm	20 cm		
5	100 cm	98 cm		

Answer the following Questions:

1. Which ellipse is the most eccentric? Ellipse # _____
2. Which ellipse is the least eccentric? Ellipse # _____
3. Considering Ellipses #1 and #2, which Ellipse is more eccentric? # _____
4. If both Ellipse 1 and 2 have the same 30 cm major axis then why is one more eccentric than the other?

Answer: _____

5. Compute the Eccentricity of the Ellipse in the table below. Use the equation on page 1 and show your work in the box to the right. Round to hundredths place.



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