Displaying your calculation for the eccentricity of an ellipse

Eg.

$$b = 13.1 \text{ cm}$$
$$a = 16.5 \text{ cm}$$

Note: only one decimal place.

Using

$$e = \sqrt{1 - \left(\frac{b}{a}\right)^2}$$

Your use of the R.T.C. might seduce you to quoting to two — or even three — decimal places. Be aware that your measurements of the Semi-Major and Minor axes do not justify more than one decimal place.

Substituting:

$$e = \sqrt{1 - \left(\frac{13.1 \text{ cm}}{16.5 \text{ cm}}\right)^2}$$

$$= \sqrt{1 - (0.8)^2}$$

$$= \sqrt{1 - 0.6(4)}$$

My turbo-assisted Slide Rule does not lead me astray...

$$= \sqrt{0.3(6)}$$

$$= 0.6$$

[Yes, note my coplanar "equal" signs.]

The eccentricity of my "Rolls-Royce"/"twenty-four Carat" ellipse is calculated to be 0.6.

DF
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P.S.

I acknowledge Gurprit Assi's vital role in this calculation.