## Eccentricity of an ellipse

An ellipse which is not a circle has eccentricity $0<e<1$. (A circle has eccentricity 0 .) The ellipse with equation

$$
\frac{x^{2}}{a^{2}}+\frac{y^{2}}{b^{2}}=1
$$

where $a>b$, has eccentricity $e$ given by

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

