

A photograph of a Cleveland Launcher driver is shown. The underside of the club is in the shape of a parabola. A drawing of this parabola is also shown.

In the drawing below, F is the focus of the parabola and the line AFB represents a focal chord of the curve
(a) Determine the position of the directrix and the axis of the parabola.
(b) Draw the portion of the curve as shown.

## Key Principles:

$A$ and $B$ are the same distance from $F$ as they are from the $\qquad$
The axis is drawn $\qquad$ to the directrix.

The vertex lies midway between the focus and the $\qquad$
The eccentricity of a parabola is always $\qquad$
eccentricity line

latus rectum



