$$\frac{(x-\mathtt{DX})^2}{\mathtt{AX}^2}+\frac{(y-\mathtt{DY})^2}{\mathtt{AY}^2}<1$$
$$\&\&\ \min(\mathtt{DX1},\mathtt{DX2})<x-\mathtt{DX}<\max(\mathtt{DX1},\mathtt{DX2})$$
$$\&\&\ \min(\mathtt{DY1},\mathtt{DY2})<y-\mathtt{DY}<\max(\mathtt{DY1},\mathtt{DY2})$$