Math 10270 : Quiz 4

1. Find the equation of the parabola with focus $(4, 0)$ and directrix the vertical line $x = -2$. Give a rough sketch of the parabola, labeling the focus, the directrix and the point where the parabola hits the x-axis.

2. Find the intersection points between the line through the origin $(0,0)$ of slope 3 and the circle with center $(5,0)$ of radius 5.