## Quiz 4

Show all your work. No credit is given without reasonable supporting work. There are two sides to this quiz.

1. ( $\S 1.1 \# 77)$ Consider the points $(x, y)$ that are the same distance from the $x$-axis as to the $y$-axis.
(a) [1] Sketch the points described.
(b) [2] Find the equation for the points.

2. [1] (§4.1 \#12) Draw $\frac{5 \pi}{8} \mathrm{rad}$.
3. [1] (WebHW16 \#20) Let $\theta$ be an angle such that $\tan (\theta)<0$ and $\cos (\theta)<0$. Which quadrant is $\theta \mathrm{in}$ ?
4. [2] (Circle Worksheet) Find the point(s) on the unit circle whose first coordinate is $\frac{1}{2}$. Indicate how you found your answers.
5. [3] (WebHW16 \#23) Given that $\sin (\phi)=\frac{24}{25}$ and $\tan (\phi)>0$, find $\tan (\phi)$ exactly.
