You have 10 minutes to complete the quiz. Calculators are not permitted, and remember to show your calculations and explain your reasoning in order to receive full credit.

1. If $f(x, y) = |x| + |y|$, sketch the 3-D graph and a contour plot of $f$ on the domain $x \in [-2, 2], y \in [-2, 2]$.

The level curves $|x| + |y| = k$ will be diamonds and the graph of $f$ (if you cut it off at some level curve $f(x, y) \leq k$) will look like an inverted pyramid.