Name:

M427L Quiz (2/8/22)

1. Find a function $f(x, y)$ so the the plane P passing through the points $(-1, 2, 1)$, $(3, 0, 2)$, $(4, 1, -1)$ is the graph of f. That is, find $f : \mathbb{R}^2 \to R$ so that $P = \{(x, y, z) \in \mathbb{R}^3 : z = f(x, y)\}$.

2. Sketch the region R described in *polar coordinates* by

$$R = \left\{ (r, \theta) : \begin{array}{c} -\pi/2 < \theta < \pi/2 \\ 1 \leq r \leq \theta^2 + 2 \end{array} \right\}.$$