Show all work. Incomplete answers may receive little or no credit.

Sketch the following surfaces in $\mathbb{R}^3$. Be sure to label your axes. What is the name of each surface?

1. $x = y^2 + 2$

2. $z = x^2 + \dfrac{y^2}{4} + 3$

3. $\dfrac{-x^2}{4} + \dfrac{y^2}{9} + \dfrac{z^2}{1} = 1$