Name:

- 1. Graph the following in \mathbb{R}^3 .
 - (a) z = 2
 - (b) $x^2 + y^2 + z^2 = 8$
 - (c) $x^2 + y^2 = 4$ For this one first graph $x^2 + y^2 = 4$ in \mathbb{R}^2 then use that to graph in \mathbb{R}^3
 - (d) $z = y^2$ For this one first graph in \mathbb{R}^2 then use that to graph in \mathbb{R}^3
 - (e) the intersection of $x^2 + y^2 = 1$ and z = 2
- 12.2: 13, 15, 31, 26
- $12.3:\quad 8,\ 9,\ 12,\ 22,\ 30$
- 12.4: 6,9,29,33,44,47