Stats Assignment 8

page 346 # 3.104

a. H_A = ≠ 364 licks
H_0 = ≥ 364 licks

b. H_A = > 200
H_0 = ≤ 200

c. H_0 = arm span = 6 feet
H_A = arm span ≠ 6 feet

page 369 # 3.114

a. Probably right-skewed, seeing as the sd is greater than the mean

b. H_0 = $x \leq 6$
H_A = $x > 6$

$$\frac{\bar{x} - \mu_0}{s/\sqrt{n}} + \frac{4.5 - 6}{5.9/\sqrt{30}} = \boxed{z = -1.3925}$$

$\boxed{p^* = .9181144258}$

(normalcdf (-1.3925, 1000000, 0, 1)

$p^* > \alpha$, so we can fail to reject the null hypothesis