8.) ✓ Should prefer logistic regression, because KNN regression with K=1 will have train error rate of 0% (blc will classify each point based on itself only) but test = 36% so that avg error rate over test and train = 18%.

As logistic reg test error = 30% < 36% KNN test error rate, I prefer logistic regression here.

9.) (a.) [redacted]

$$\text{Odds} = .37 = \frac{p}{1-p} \Rightarrow .37(1-p) = p$$

$$.37 - .37p = p$$

$$.37 = 1.37p \Rightarrow p = 27\%$$ ✓

(b) $$\text{Odds} = \frac{p}{1-p} = \frac{.16}{1-.16} = 0.1905$$ ✓