

3.2)

a) -0.0662 in the equation:

$$0.6930 - 0.0662x$$

is the change in the probability of a starting pitcher pitching a full game each decade. So, there's a decrease in 6.62% with each later decade

b)

$$\hat{P}(y=1) = 0.6930 - 0.0662(12)$$

$$= -0.1014$$

The 0.034 prediction is more plausible for 2 reasons

1) It makes logical sense for the prediction to be positive (3.4%) than negative (-10.14%)

2) The logistic regression model is designed for output between 0 & 1, which would be the range we would expect here