

Q4:

The expected # of pts by leaving it blank: 0

The expected # of pts by guessing with θ : $3 \cdot \theta + (-4)(1-\theta) = -4 + 7\theta$

We need: $-4 + 7\theta > 0 \Rightarrow \theta > \frac{4}{7}$

So θ must be higher than $\frac{4}{7}$, which is approximately 0.57, so that we can have expected # of pts by guessing with θ higher than leaving it blank.