

# Theory 2 Homework 2

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*07 February, 2019*

4.

a.

$$P(X_{(5)} \geq 5) = 1 - \sum_5^{20} \binom{20}{k} (0.5)^k (0.5)^{20-k}$$

```
1 - sum(dbinom(size = 20,prob = 0.5,x=c(5:20)))
```

```
## [1] 0.005908966
```