1. (4) Give a definition of a statistical model. Use 25 words or fewer.

2. (4) What are the first and last (5th) steps in our framework for statistical analysis?

3. (4) Suppose $S \sim \text{Binomial}(12, 0.4)$. Which of the following commands will calculate P(S > 7)? Put an x next to all correct answers.

```
dbinom(7:12, size = 12, prob = 0.4)
dbinom(8:12, size = 12, prob = 0.4)
pbinom(7, size = 12, prob = 0.4)
pbinom(8, size = 12, prob = 0.4)
1-pbinom(7, size = 12, prob = 0.4)
1-pbinom(8, size = 12, prob = 0.4)
```

4.	(4) In the exercises, we assumed that all 21 events were independent. In the context of the study, give a reason why this assumption might not be appropriate. Use 20 words or fewer.
5	(2) When we fail to reject a null hypothesis that $\theta = \theta_0$, informally, we are saying that θ_0
0.	is a value of the parameter. Fill in the blank.
6.	(2) When we use a hypothesis test to construct a confidence interval, the confidence interval contains all values θ_0 for which we (reject) or (fail to reject) the null hypothesis that $\theta = \theta_0$. Circle the correct answer.