Here are some questions which use the concepts developed in class today:

- 1. On average, I bake 50 cookies a week.
 - (a) What can you say about the probability I make 75 or more cookies in a given week? The answer should be in the form an upper bound.

(b) Can you devise a scenario where I reach this upper bound?

- 2. The variance of a week's baking output is known to be 25.
 - (a) What can you say about the probability that this week's production is between 40 and 60? The answer should be in the form of an upper bound.

(b) Can you devise a scenario where I reach this upper bound?