Probability P5: Binomial Experiments

Stink-Eye McGee, the gunslinger, can hit the target he is shooting with a probability of 0.75. If he takes 8 shots at a group of targets, that is the probability that:

- 1. He will hit 4 targets?
- 2. He will hit all of the targets?
- 3. He will miss all of the targets?

You throw a coin 15 times. What is the probability that:

- 4. 10 are heads?
- 5. 10 are tails?
- 6. 0 are tails?

You throw a die 10 times. What is the probability that:

- 7. The number 6 appears 5 times?
- 8. The number 6 appears 2 times?
- 9. An odd number appears 5 times?

A computer company finds that 5 out of 100 of their computers break down. If they send a shipment of 12 computers to our school, what is the probability that:

- 10. 5 of the computers will break down?
- 11. AT LEAST 2 computers will break down?