AP Statistics Chapter 14 - 15 Review

ANSWERS ONLY (for explanations, please come in for tutorials)

- 1. "A" and "B" are independent: $P(A \cap B) = 0.18$, $P(A \cup B) = 0.72$, P(A|B) = 0.6"A" and "B" are disjoint: $P(A \cap B) = 0$, $P(A \cup B) = 0.9$, P(A|B) = 0"A" and "B" are dependent: $P(A \cap B)$, $P(A \cup B)$, and P(A|B) cannot be determined.
- 2. "A" and "B" are independent: $P(A \cap B) = 0.2065$, $P(A \cup B) = 0.7335$, P(A|B) = 0.35"A" and "B" are disjoint: $P(A \cap B) = 0$, $P(A \cup B) = 0.94$, P(A|B) = 0"A" and "B" are dependent: $P(A \cap B)$, $P(A \cup B)$, and P(A|B) cannot be determined.
- 3. P(A ∪ B) = 0.5
- 4. C
- 5. B
- 6. A
- 7. C
- 8. B 9. D
- 10. A
- 11. A
- 12. D
- 13. B

14. Probably 0.5 (or whatever the probability of having a girl was for each of the other 5 babies)

- 15. a) 0.3 b) 0.1
- 16. a) 0.0909 b) 0.3182 c) 0.2879
- 17. a) 0.4540 b) 0.3535 c) No.
- 18. a) 0.25 b) 0.75 c) No.
- 19. a) 0.3 b) 0.6 c) 0.325 d) 0.9231
- 20. a) E(X) = 1.2, SD(X) = 0.7483b) E(X) = 280, SD(X) = 87.178