

Answer Key
Testname: 6_2

- 1) C
- 2) D
- 3) A
- 4) B
- 5) E
- 6) A
- 7) The IQR is from 185.5 mg/dL to 252.5 mg/dL or is 67 mg/dL.
- 8) E
- 9) D
- 10) D
- 11) B
- 12) B
- 13) B
- 14) a. 0.5; b. 0.3085
- 15) 0.2676
- 16) C
- 17) E
- 18) B
- 19) D
- 20) C

Answer Key
Testname: 6_3

- 1) D
- 2) E
- 3) C
- 4) B
- 5) E
- 6) E
- 7) D
- 8) C
- 9) A
- 10) E
- 11) D
- 12) C
- 13) E

Answer Key
Testname: 6

- 1) E
- 2) B
- 3) C
- 4) B
- 5) D
- 6) A
- 7) C
- 8) D

Answer Key

Testname: 5_3

- 1) A
- 2) C
- 3) C
- 4) A and B are independent events if $P(A|B) = P(A)$, $P(B|A) = P(B)$, or $P(A \text{ and } B) = P(A) \times P(B)$. If one equation holds, all 3 equations hold. If one equation does not hold, none of the equations hold. Therefore, only one of the equations must be checked.
- 5) No because $P(\text{Male and never used}) = 0.314 + 0.48 - 0.67 = 0.124$ which does not equal $P(\text{Male}) \times P(\text{never used}) = 0.48(0.314) = 0.15$.
- 6) D
- 7) B
- 8) D
- 9) E
- 10) C
- 11) D
- 12) a. $P(M \text{ and } D) = 7/48$; b. $P(D|F) = 7/16$; c. $P(M|C) = 1/3$
- 13) 0.90
- 14) $P(F1 \text{ and } F2) = P(F2|F1) \times P(F1) = 0.025 \times 0.45 = 0.011$
- 15) $P(F1 \text{ and } F2) = P(F2|F1) \times P(F1) = 0.15 \times 0.45 = 0.068$
- 16) a. 0.9927; b. 0.6423
- 17) a. $P(\text{luggage making the connection}) = 0.8725$; b. No. The explanations may vary.
- 18) $P(\text{first flight delayed} | \text{luggage not making the connection}) = 0.4918$
- 19) a. 0.17; b. No, because $P(\text{shopper is male and shopper is over 40}) \neq 0$; c. (i) 0.5, (ii) 0.3542
- 20) a. $P(A) = 0.35$, $P(B) = 0.40$; b. $P(A \text{ and } B) = 0.20$; c. $P(A|B) = 0.5$; Given a working woman has more than 2 children, the chance that she has a low salary is 50%. d. No, b/c $P(A|B) \neq P(A)$.
- 21) a. 0.85
b. 0.3125
c. 0.9524
d. No, because $P(\text{student passes the test} | \text{student misses 5 or more classes}) \neq P(\text{student passes the test})$.