

Math 365 Exam 1 Review Problems

1. (a) 0.7375
(b) 0.16
(c) 0.84
(d) NO $P(C \cap B) \neq P(C)P(B)$
(e) YES $P(A \cap B) = P(A)P(B)$
(f) NO (non-empty intersection)
2. (a) 0.286
(b) 0.758
(c) 0.78125
3. 0.0109
4. \$12.79
5. (a) 0.9811
(b) \$12.42
6. 0.1558
7. Proof left to the student.
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9. (a) $X \sim b(25, 0.10)$
(b) 2.5
(c) 0.2265
(d) 0.000010197
10. (a) Hypergeometric
(b) 2.5
(c) 0.2637
(d) 0
11. (a) 0.9866
(b) 0.4613
(c) 0.2252
12. (a) 0.0016
(b) 0.5956
(c) 0.01456