

Answers to Conditional Probability Problems

1)

a. $P(K) \cdot P(D') = .2625$

b. $P(K) = .75$

c. $P(D \cap K) = .4875$

d. $P(D/D \cup K) = .7123$

2)

a. 19

b. $\frac{11}{70}$

c. $\frac{19}{36}$

3)

a. $P(A/B) = \frac{1}{2} = .5$

b. $P(B/A) = \frac{5}{6} = .8\bar{3}$

c. $P(A/B') = \frac{1}{10} = .1$

d. $P(A'/B') = \frac{9}{10} = .9$

4)

a. $\frac{8}{45}$

b. $\frac{22}{45}$

c. $\frac{6}{11}$

5)

a. $\frac{1}{2}$

b. $\frac{3}{10}$

c. $\frac{1}{4}$

6)

b. $\frac{1}{2}$

c. $\frac{2}{3}$

7)

$\frac{1}{3}$

8)

a. .33

b. .49

c. .82

d. .551