

## Chapter 7 Solutions

## Section 7.1

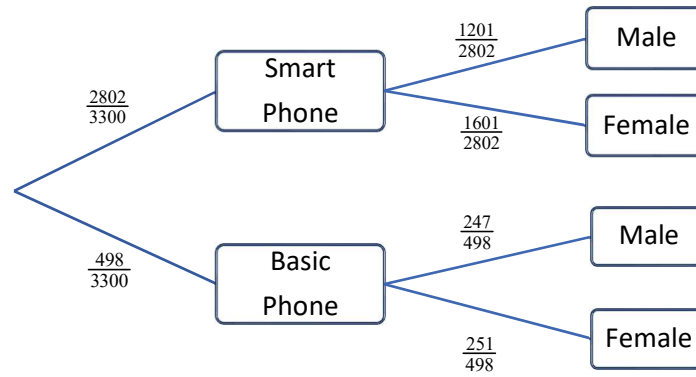
- Problem 1 a)  $S = \{0, 1, 2, 3, 4\}$ ,  
 b)  $S = \{YYYY, YNNN, NYNN, NNYY, NNNY, NYYY, YNYY, YNYY, YYYN, YYNN, YNNY, NNYN, NYNY, NNNN\}$   
 c)  $\{YYYY, YYYN, YYNY, YNYY, NYYY\}$
- Problem 2 a) No, b) Yes, c) No
- Problem 3  $\frac{1}{4}$
- Problem 4  $\frac{76}{108}$

## Section 7.2

- Problem 1  $\frac{13}{52}$
- Problem 2  $\frac{13}{20}$
- Problem 3 a)  $\frac{38659}{159172} \approx 0.243$ , b)  $\frac{4023}{159172} \approx 0.025$
- Problem 4  $\frac{3}{4}$
- Problem 5 a)  $\frac{7}{20}$ , b)  $\frac{18}{20}$
- Problem 6  $\frac{120513}{159172} \approx 0.757$
- Problem 7 a) B and A, b) Needs a new battery or needs a new alternator, c) 0.55
- Problem 8  $\frac{10}{36} \approx 0.278$
- Problem 9 a)  $\frac{425}{5740} \approx 0.074$ , b)  $\frac{2835}{5740} \approx 0.494$ , c)  $\frac{725}{5740} \approx 0.126$ , d)  $\frac{3135}{5740} \approx 0.546$

## Section 7.3

- Problem 1 a)  $\frac{1448}{3300}$ , b)  $\frac{498}{3300}$ , c)  $\frac{247}{3300}$ , d)  $\frac{247}{498}$
- Problem 2



Problem 3 a) approximately 0.333, b) approximately 0.143

Problem 4 No

Problem 5 approximately 0.076

Problem 6 approximately 0.504

Problem 7 approximately 0.048