

# Answers

5. mutually exclusive;  $\frac{27}{52} \approx 52\%$

6. inclusive;  $\frac{41}{52} \approx 79\%$

7.  $\frac{5}{8} = 62.5\%$     8.  $\frac{5}{8} = 62.5\%$

9.  $\frac{3}{8} = 37.5\%$     10.  $\frac{3}{4} = 75\%$

11.  $\frac{19}{36} \approx 53\%$     12.  $\frac{13}{36} \approx 36\%$

13.  $\frac{5}{9} \approx 56\%$     14.  $\frac{22}{36} \approx 61\%$

15.  $\frac{5}{18} \approx 28\%$

## Lesson 10.5

1.  $0.02 = 2\%$     2.  $0.08 = 8\%$

3.  $0.04 = 4\%$     4.  $0.05 = 5\%$

5.  $0.008 = 0.8\%$     6.  $0.01 = 1\%$

7.  $\frac{49}{144} \approx 34\%$     8.  $\frac{1}{24} \approx 4\%$

9.  $\frac{3}{16} = 18.75\%$     10.  $\frac{25}{36} \approx 69\%$

11.  $\frac{7}{72} \approx 10\%$     12.  $\frac{1}{18} \approx 6\%$

13.  $\frac{1}{9} \approx 11\%$     14.  $\frac{1}{4} = 25\%$

15.  $\frac{1}{36} \approx 3\%$     16.  $\frac{4}{9} \approx 44\%$

17.  $\frac{1}{24} \approx 4\%$     18.  $\frac{1}{8} = 12.5\%$

19.  $\frac{1}{12} \approx 8\%$     20.  $\frac{1}{3} \approx 33\%$

## Lesson 10.6

1.  $\frac{1}{6} \approx 17\%$     2.  $\frac{1}{2} = 50\%$     3.  $\frac{2}{3} \approx 67\%$

4.  $\frac{1}{3} \approx 33\%$     5.  $\frac{1}{2} = 50\%$     6.  $\frac{1}{8} = 12.5\%$

7.  $\frac{1}{8} = 12.5\%$     8.  $\frac{1}{2} = 50\%$     9.  $1 = 100\%$

10.  $\frac{1}{4} = 25\%$     11.  $\frac{3}{5} = 60\%$     12.  $\frac{2}{5} = 40\%$

13.  $\frac{1}{5} = 20\%$     14.  $\frac{4}{5} = 80\%$     15.  $\frac{1}{2} = 50\%$

16.  $\frac{1}{3} \approx 33\%$     17.  $0.625 = 62.5\%$

18.  $\frac{9}{10} = 90\%$     19.  $\frac{1}{2} = 50\%$

20.  $0.064 = 6.4\%$     21.  $0.4 = 40\%$

22.  $0.5625 = 56.25\%$

## Lesson 10.7

1-6. Simulation results will vary.

## Practice — Chapter 11

### Lesson 11.1

1. 2.5, 5, 7.5, 10, 12.5, 15

2.  $0, \frac{1}{2}, 1, 1\frac{1}{2}, 2, 2\frac{1}{2}$

3. 13, 16, 21, 28, 37, 48

4. 20, 70, 220, 670, 2020, 6070

5. 1, 101, 201, 301, 401, 501

6. -5, -15, -45, -135, -405, -1215

7.  $a_1 = 1; a_n = 11a_{n-1}; 14,641; 161,051; 1,771,561$

8.  $a_1 = 81; a_n = a_{n-1} - 3; 69, 66, 63$

9.  $a_1 = 2; a_n = -3a_{n-1}; 162, -486, 1458$

10.  $a_1 = \frac{1}{4}; a_n = -4a_{n-1}; 64, -256, 1024$

11.  $a_1 = 2; a_n = 3a_{n-1} + 5; 362, 1091, 3278$

12.  $a_1 = -2; a_n = 5a_{n-1} - 4; -1874; -9374; -46,874$

13.  $4.5 + 9 + 13.5 + 18 + 22.5 + 27 + 31.5; 126$

14.  $11 + 22 + 35 + 50 + 67; 185$

15. 210    16. -24    17. 10

18. 1432.5    19. 397    20. 1911.4