



4-95. See below.

- a. $\frac{8}{36}$
- b. $\frac{4}{36}$
- c. $\frac{24}{36}$

4-96. See below.

- a. 5 ways.
- b. 6 ways.
- c. 11
- d. $\frac{5}{11}$

4-97. See below.

- a. $x = 13$, Pythagorean Theorem
- b. $x = 80^\circ$, Alternate interior angles and the Triangle Angle Sum

4-98. $(x + 2)(x + 5) = 40$, $x^2 + 7x - 30 = 0$, so $x = -10$ or 3 . Since x cannot be negative, $x = 3$. Therefore, the dimensions of the rectangle are 5 and 8 units.

4-99. See below.

- a. Less than 45°
- b. Equal to 45°
- c. More than 45°

4-100. The slope is $-\frac{7}{10}$. Points will vary. $y = -0.7x + 82.5$ A few possible solutions: (5, 79), (15, 72), (25, 65), etc.