

3-76. See below.

- a. $(5, -2)$
- b. $(-4, 2)$
- c. $(3, 3)$ It is the center of the figure, or the midpoint of each diagonal.

3-77. See below.

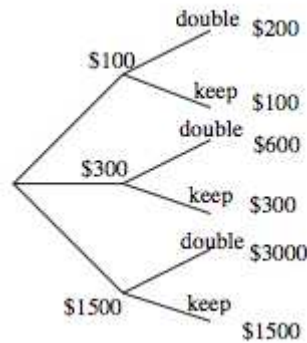
- a. $y = \frac{1}{2}x + 2$
- b. $A = 4$ sq. units; $P = 6 + \sqrt{20} \approx 10.47$ units
- c. $y = -2x + 2$

3-78. See below.

- a. $x = 51^\circ$ alternate interior angles and Triangle Sum Theorem
- b. $x = 43^\circ$ circle has 360°
- c. $x = 1$ Pythagorean Thm

3-79. See below.

- a. See tree diagram to the right.
- b. Yes
- c. $\frac{1}{6}, \frac{3}{6}$
- d. $\frac{1}{2}$, no—the spinners are independent
- e. $\frac{2}{6}$, because now the possible outcomes are \$100, \$200, \$1500, \$200, \$400, and \$3000.



3-80. See below.

- a. $n = 32$
- b. $m \approx 14.91$

3-81. Missing side length of first rectangle must be 4 m because the perimeter is 26 m. Missing side length of second rectangle must be 9" because the area is 36 sq. in. Since angles are equal and ratios of corresponding side lengths are equal, therefore, the rectangles are similar. In fact, they are congruent because $r = 1$.