



**8-71. See below.**

- a.  $A = 34 \text{ units}^2$ ;  $P \approx 25.7 \text{ units}$
- b.  $A = 306 \text{ units}^2$ ;  $P \approx 77 \text{ units}$
- c. ratio of the perimeters = 3; ratio of the areas = 9

**8-72.** 80 inches or  $\approx 6.67$  feet

**8-73.** The area of the hexagon  $\approx 23.4 \text{ ft}^2$ . Adding the rectangles makes the total area  $\approx 41.4 \text{ ft}^2$ .

**8-74.**  $\frac{4}{21} \approx 19.05\%$ ;  $k = 0, 6, 10, 12$  are factorable.

**8-75. See below.**

- a. Reasoning will vary, but most students should realize that it is most likely you will earn more extra credit if the class spins the spinner with the options of 5 and 10 points.
- b. Reasoning will vary, but now the first spinner is definitely more attractive.

**8-76.**  $4x^2 = 2x^2 + 17x - 30$ ,  $x = 2.5$  or  $6$ : yes, there are two possible answers.

**8-77.** B