

**3-18.** Result should be 12 units tall and 16 units wide.

## **3-19.** See below.

- a. The 15 corresponds to the 6, while the 20 corresponds to the 8. Multiple equivalent ratios are possible. One possibility:  $\frac{15}{6} = \frac{20}{8} = 2.5$
- b. 25 and 10;  $\frac{25}{10} = 2.5$ ; yes
- **3-20.** Yes they are parallel because they have the same slope:  $-\frac{3}{5}$

3-21. See below.

a. 
$$6x^2 - 8x$$

b. 
$$2x^2 + x - 15$$

c. 
$$4x^2 - 25$$

d. 
$$2x^3 - 5x^2 - 3x$$

**3-22.** 
$$x = 10^{\circ}$$
,  $y = 61^{\circ}$ 

## 3-23. See below.

a. No, this is not convincing. While the facts are each correct, the conclusion is not based on the facts. As stated in Fact #2, a square is a rectangle *because it has four right angles*. However, a rhombus does not have to have four right angles, so therefore there is not enough evidence that a rhombus is a rectangle.