



3-5. See below.

- a. $AB = 5, BC = 4, AC = 3$
- b. $A'B' = \sqrt{100} = 10$ units, $B'C' = 8$ units, and $A'C' = 6$ units
- c. $A = 24$ sq. units; $P = 24$ units

3-6. See below.

- a. $x = 18$
- b. $x = 3$
- c. $x = 6$
- d. $x = 2$

3-7. See below.

- a. $\approx 30^\circ, \approx 40^\circ, \approx 110^\circ$
- b. Obtuse scalene triangle

3-8. See below.

- a. $\frac{4}{5}, y = \frac{4}{5}x + \frac{9}{5}$
- b. $MU = \sqrt{41} \approx 6.40$ units
- c. One is a ratio (slope) while the other is a length (distance).

3-9. See below.

- a. triangle inequality
- b. Pythagorean Theorem
- c. base angles not equal

3-10. See below.

- a. If a shape is an equilateral triangle, then it has 120° rotation symmetry.
- b. If a shape is a rectangle, then the shape is a parallelogram.
- c. If a shape is a trapezoid, then the area of the shape is half the sum of its bases multiplied by its height.