

8-2, 8-4 **Assignment C**

Directions: Draw a diagram for each problem. Then, apply what you know about Special Right Triangles or Pythagorean Theorem to solve for the indicated measurement.

- 1) Find the length of a diagonal of a square whose perimeter is 48.

$$12\sqrt{2}$$

- 2) A diagonal of a square has length 8. What is the perimeter of the square?

$$16\sqrt{2}$$

- 3) An altitude of an equilateral triangle has length $6\sqrt{3}$. What is the perimeter of the triangle?

~~36~~

$$36$$

- 4) Find the altitude of an equilateral triangle if each side is 10 units long.

$$5\sqrt{3}$$

- 5) A rectangle has length 6 and width 2. How long is each diagonal?

$$2\sqrt{10}$$

- 6) Find the perimeter of a square if each diagonal is 4cm long.

$$8\sqrt{2}$$

- 7) The perimeter of an equilateral triangle is 18cm. Find the length of an altitude.

$$3\sqrt{3}$$

- 8) An isosceles triangle has sides 10, 10 and 12. How long is the altitude to the base?

$$8$$