Name: _____

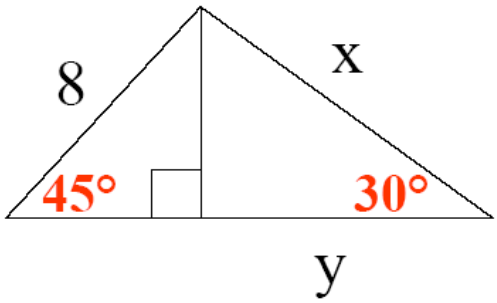
Special Right Triangles

Exercise 1: Find the length of the diagonal of a square with perimeter 48.

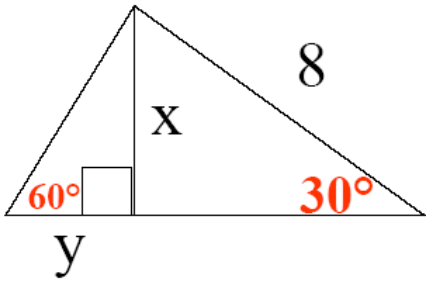
Exercise 2: An altitude of an equilateral triangle is $6\sqrt{3}$. What is the perimeter?

Exercise 3: Find the values of x and y in each diagram.

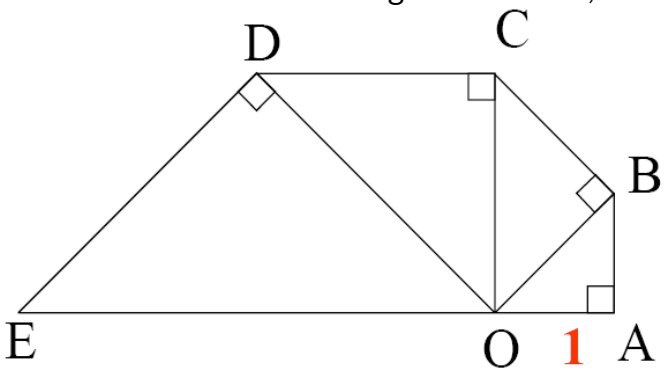
1)



2)



Exercise 4: The diagram shows four 45°-45°-90°triangles. If OA = 1, find OB, OC, OD, & OE.



Exercise 5: The perimeter of a rhombus is 64 and one of the angles measures 120. Find the lengths of the diagonals.

Exercise 6: Explain why any triangle having sides in the ratio 1: $\sqrt{3}$: 2 must be a 30°-60°-90°triangle.