If the hypotenuse of a right triangle is 13m and the one leg is 12 m, find the length of the other leg.

A 17 foot ladder is placed against the side of a building that is 15 feet above the ground. What is the distance of the base of the ladder to the building?

What is the *area* of an equilateral triangle with perimeter 30 meters?

Given the lengths of the sides of a triangle, determine if each is *right, acute, obtuse, or neither*:

a) 30, 40, 50

b) 3, 7, 12

c) 6, 8, 11

d) 2, 2, 2

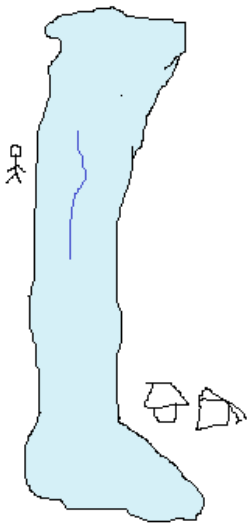
e) 4, 6, 8

A boat is tied to a dock by 25 feet of rope.
The dock is 15 feet above the water.

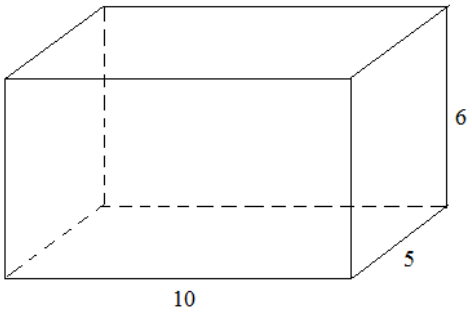
If 8 feet of rope is pulled in, how far will the boat move toward the dock?

If the endpoints of a hypotenuse are (-2, 3) and (5, -4), identify *two possible* vertices of the right triangle.

A boy stands on the shore of a one-mile wide lake.
He wants to reach camp down shore 3 miles on the opposite side.
He can swim 2mph and walk 4mph.
Is it quicker to swim across and then walk OR swim directly to the camp?



Find the length of the diagonal of the rectangular prism.



If the figure is a regular hexagon,

a) how many diagonals?

b) what is the sum of the lengths of all the diagonals?