## Power Point Notes for Area and Vertical Motion Word Problems, Chapter 7 Alg 1H

1. A triangle has an area of 40  $cm^2$ . Find the height, h, of the triangle.

2. The length of a rectangular swimming pool is 20 ft greater than its width. The area of the pool is 525 ft<sup>2</sup>. What are its dimensions?

Recall the Vertical Motion Model:	
h is	-
s is	-
t is	-
vis	

3. While standing on the roof of a building that was 400 ft high, you dropped an egg. How many seconds will it take the egg to hit the ground? 4. How long would it take a hammer to hit the roof of a truck if the hammer was dropped from a height of 70 ft? The roof of the truck is 6ft high.

5. A football is kicked upward at a velocity of 42 ft per second (ft/s). When will it reach a height of 20 ft?

6. A soccer player kicks a soccer ball with a velocity of 32 ft/s. If the ball reaches a height of 16 ft, how long does it stay in the air (total time)?

7. A monkey throws a coconut down from a tree with an initial velocity of 24 ft/sec. If the monkey is 72 feet up in the tree, how long will it take for the coconut to hit the ground?