MPM 2D
**SOLVING RIGHT TRIANGLES**
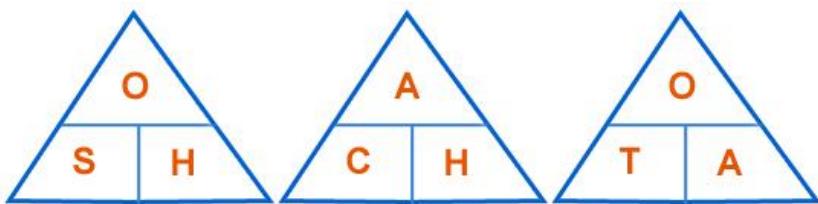
EXAMPLE 1: Determine the unknown value.

A)

15.6 m

k

42°

B)

33.9 mm

49.2 mm

θ
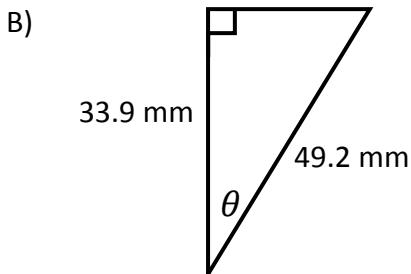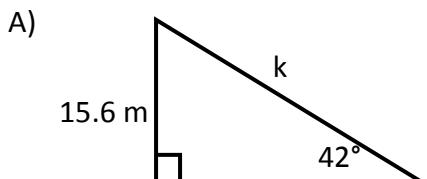
EXAMPLE 2: Solve each triangle.

A)

20 cm

35°
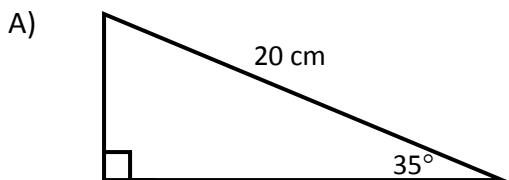
B)   ΔPQR, P = 90°, q = 14m, r = 8m

EXAMPLE 3: A ladder leaning against a vertical wall is safe if its base makes an angle between 75° and 79° with the ground.

A)   Is a 6-foot ladder safe if its top is placed 5 feet up the side of a building?

B)   What is the maximum safe distance from the base of the ladder to the wall?