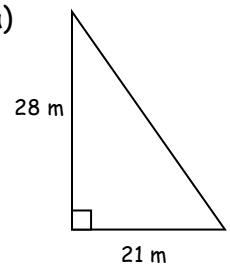
MFM 2P1 Name:_____

Pythagoras

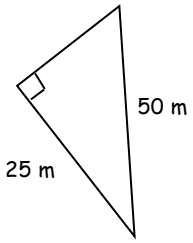
1. Use Pythagoras to determine whether the triangle with the given side lengths is a right triangle.
   a) 12, 16, 20 b) 8, 15, 17 c) 12, 9, 16

2. Solve the following triangles for the unknown side.

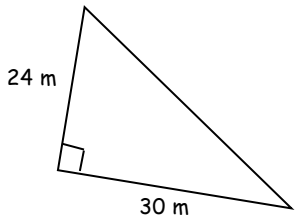
a)



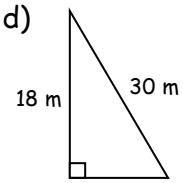
b)



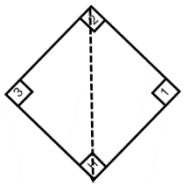
c)



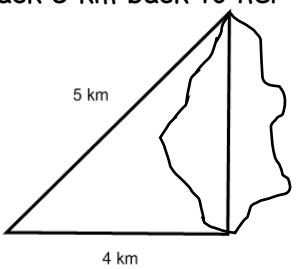
d)



3. The elementary school down the street has a baseball diamond with a distance of 14 m between each of the bases. How many feet long is the dotted line from second base to home plate?



4. Dayna canoed due south from her camp to a friend's camp across the lake. Together, they drove 4 km east along a road to another friend's camp. Dayna then hiked directly back 5 km back to her camp. Use the diagram of Dayna's route to answer the questions.
   a) How far did Dayna canoe?
   b) How far did Dayna travel altogether?



5. The side length of a sugar cube is 2.0 cm. Calculate each distance:
   a) from corner to corner across the top
   b) from the top corner to the bottom corner