Pythagorean Theorem Practice

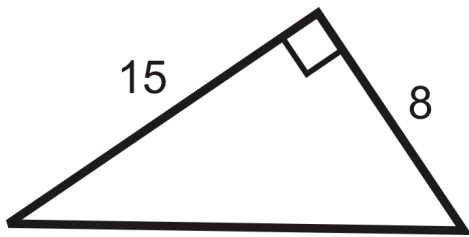*Determine if the following triangles are right.*

1) Triangle with sides: 10, 7, √149   2) Triangle with sides: 4, 9, 12
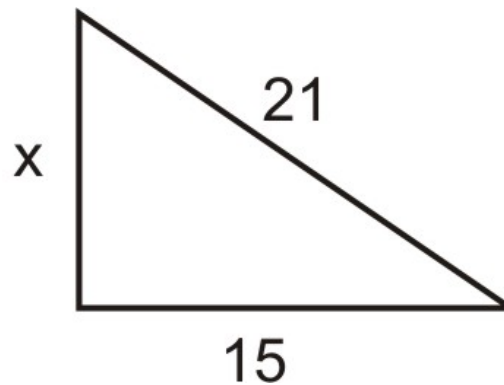
Find the length of the missing side. Assume both are right triangles.

3)   4)

15   8

X   21   15

Solve.

5) A 16ft ladder is leaning against a wall. If the ladder is 7ft away from the wall, how far up the wall does the ladder reach?

6) A football field is 100 yards by 53 yards. If a football player runs diagonally from one corner to the other, how far will he (or she!) run?

7) Jack and Jill walked 3 miles North then 2 miles East to avoid walking through a pond. How far would they have walked if they had gone through the pond.

8) T.V.s are sold by their diagonal length. If a 30" TV is 18" tall, how wide is it?