Pythagorean Theorem
Do work on Sheet

Find the length of the missing side. Round to the nearest tenth.

1)

12, c, 35

2)

c, 10, 8

3)

?, 41, 40

4)

x, 20, 8

5)

29, 20

6)

x, x, 8

7)

$4\sqrt{3}$, x, $\sqrt{8}$

8)

c, $\sqrt{6}$, $\sqrt{15}$
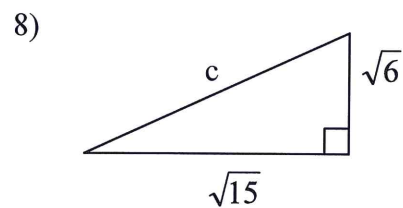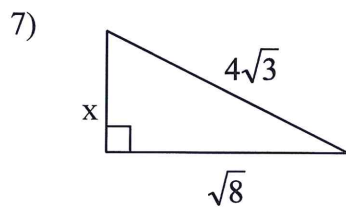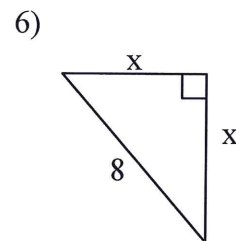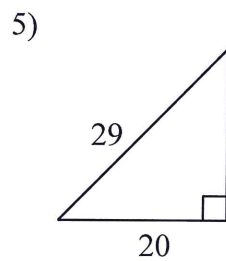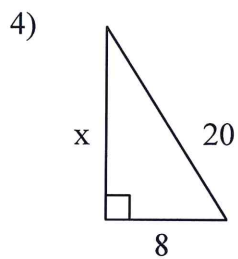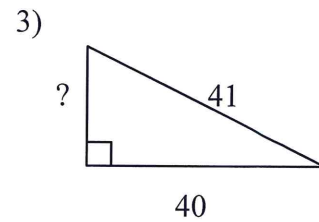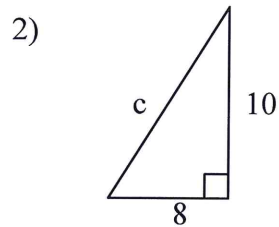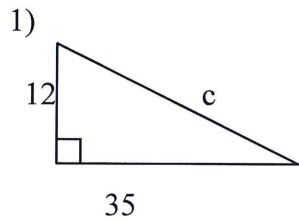
Continue with the work on the back

Tell if the following can be the sides of a right triangle.

1) 6, 10, 8

2) 7, 4, 5

3) 12, 16, 20

7) $\sqrt{7}$, $\sqrt{10}$, $\sqrt{15}$

8) $2\sqrt{3}$, $2\sqrt{5}$, $4\sqrt{2}$

9) 3, 5, $2\sqrt{8}$

4) A ladder 39 feet long leans against a building and reaches the ledge of a window. If the foot of the ladder is 15 feet from the foot of the building, how high is the window ledge above the ground?

5) What must be the length of a ladder that Mr. Rizzo can use if he wishes to place the bottom of the ladder 5 feet from the wall and he wishes to reach the window that is 15 feet above the ground? Give the answer correct to the nearest **tenth** of a foot.

6) Miss Murray traveled 24 kilometers north and then 10 kilometers east. How far was she from her starting point?

7) One day Ernie walked from his home at A to his school at C by walking along AB and BC, the sides of a rectangular open field that was muddy. When he returned home, the field was dry and Ernie decided to take a short cut by walking diagonally across the field along CA. How much shorter was his trip home than his trip to school?