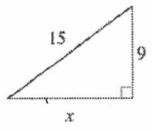
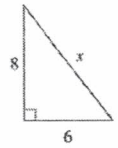
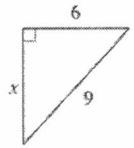
6.1

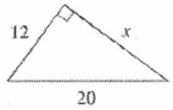
Math 2 – Pythagorean Theorem WS Name: _____

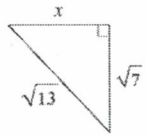
I. Find the missing side length x. Keep answers in simplified radical form. Must show work!!

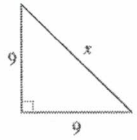
1.) 

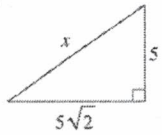
2.) 

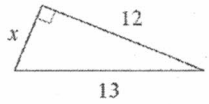
3.) 

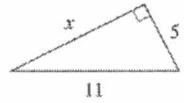
4.) 

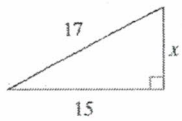
5.) 

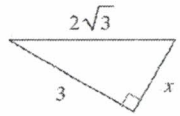
6.) 

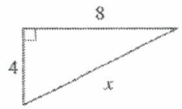
7.) 

8.) 

9.) 

10.) 

11.) 

12.) 

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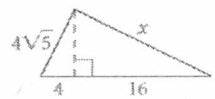
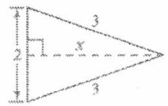
14.) 

15.) 

II. State if the three side lengths form an acute, obtuse, or right triangle. Must show work!!

16.) 10 , 12 , 15	17.) 5 , 12 , 13	18.) 9 , 17 , 11	19.) 80 , 64 , 48
20.) 15 , $\sqrt{19}$, 20	21.) $\sqrt{111}$, 16 , $\sqrt{150}$	22.) $3\sqrt{5}$, $\sqrt{15}$, $\sqrt{31}$	23.) 9 , $2\sqrt{10}$, 12

III. For the following: a.) Draw a picture representing the word problem.
b.) Find what is asked. Round to nearest tenth.

24.) An older floppy diskettes measured 5 inches on each side. What is the diagonal length of the diskette?	25.) A jogger runs 8 mi N and then 5 mi W. What is the distance the jogger must run back to his starting point?	26.) A suitcase measures 24 in long and has a diagonal length of 30 in. How high is the suitcase?
27.) Oscar's dog house is shaped like a tent. The slanted sides are both 5 ft long and the height is 4 ft. What is the length across the entire bottom of the tenth?	28.) A computer monitor is labeled at 19 in (which represents the length of the diagonal) and the screen measures to be 10 in in height. What is the actual width of the computer monitor?	29.) Seth wants to make a table where the diagonal measures to be $12\sqrt{2}$ inches. What must the sides be cut out to so that Seth makes a square table?