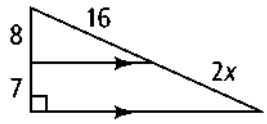
Geometry Homework – 7-5 and 8-1

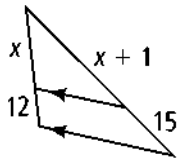
Name:_____ **Date:**_____ **Block:**_____

Algebra **Solve for *x.***

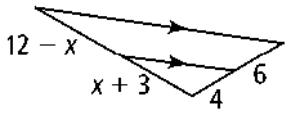
1)



2)



3)



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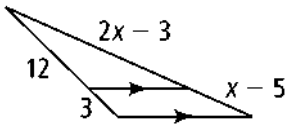

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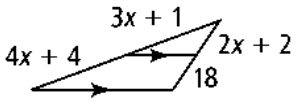
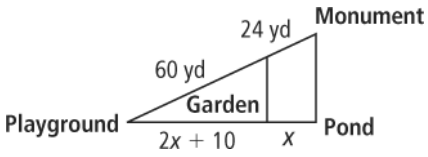


6) The map at the right shows the walking paths at a local park. The garden walkway is parallel to the walkway between the monument and the pond. How long is the path from the pond to the playground?



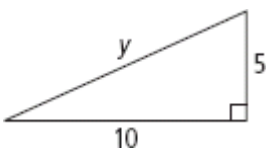
7) Triangle *QRS* has line *XY* parallel to side *RS.* The length of *QY* is 12 in. The length of *QX* is 8 in.

a) Draw a picture to represent the problem.

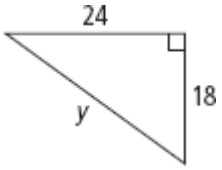
b) If the length of *XR* is 5 in., what is the length of *QS?*

Algebra **Find the value of the variable. Express in simplest radical form.**

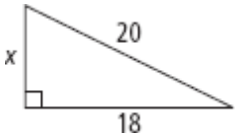
8)

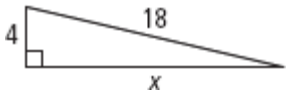


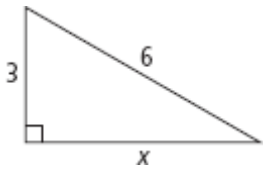
9)



Algebra **Find the value of the variable. Express in simplest radical form.**

10) 

11) 

12) 

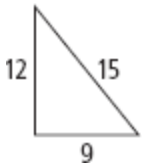
13) A repairman leans the top of an 8-ft ladder against the top of a stone wall. The base of the ladder is 5.5 ft from the wall. About how tall is the wall? Round to the nearest tenth of a foot.

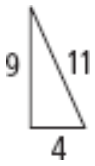
For each pair of numbers, find a third whole number such that the three numbers form a Pythagorean triple.

14) 13, 84

15) 32, 68

Is each triangle a right triangle? Explain.

16) 

17) 

18) The playing surface of a football field is 300 ft long and 160 ft wide. If a player runs from one corner of the field to the opposite corner, how many feet does he run?

19) **Reasoning** In parallelogram *ABCD, AB* = 20, *BC* = 15, and *AC* = 22. Is *ABCD* a rectangle? Explain.