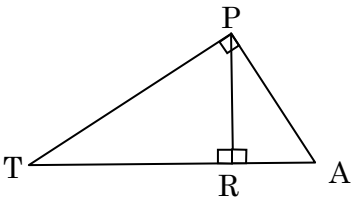
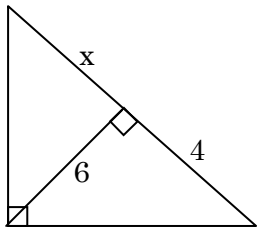
Worksheet 2 Altitude to the hypotenuse **Name** _____

1) If an altitude is drawn to the hypotenuse of triangle TAP below, then name and redraw the 3 similar triangles created.

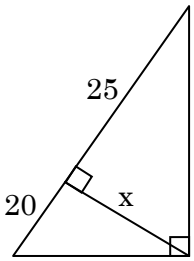


Solve for the variable(s)

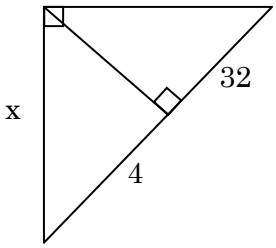
2)



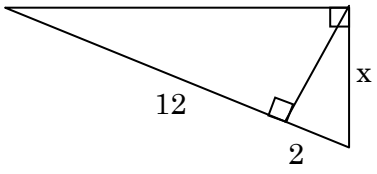
3)



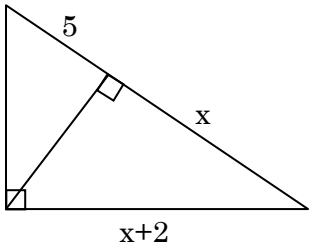
4)



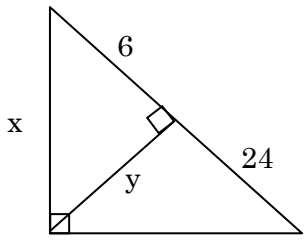
5)



6)



7)



Find the geometric mean for the following numbers.

8) 32 and 2

9) 6 and 8

10) 6 and 7

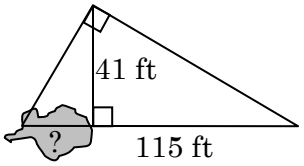
11) 10 and 6

12) 3 and 50

13) 16 and 25

14) The altitude, $\overline{XR}$, to the hypotenuse of right ΔWXY divides the hypotenuse into segments that are 8 and 10 cm long. Find the length of the altitude.

15) How far is it across the quicksand?



16) The altitude of a right triangle divides the hypotenuse into two segments whose lengths are 9 cm and 16 cm. Find the lengths of the two legs.

17) Find the lengths of GH and HK.