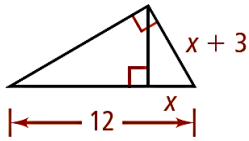


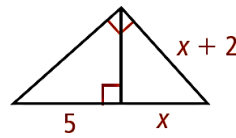
4.5.D3 – Similarity in Right Triangles

Use similar right triangle relationships and/or the Pythagorean Theorem to find the value of the variable(s). *If necessary, give the answer in simplest radical form.*

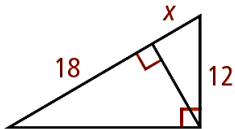
1.



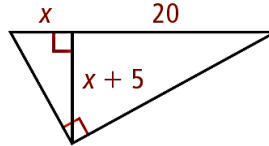
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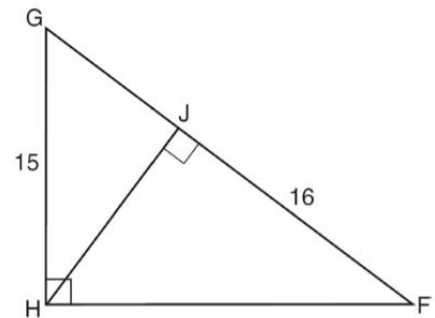
3.



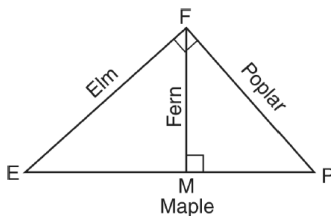
4.



5. In $\triangle FGH$, the altitude \overline{HJ} is drawn to \overline{FG} , $FJ = 16$ & $HG = 15$. Determine the length of \overline{HJ} .



6. Four streets in a town are illustrated in the diagram below. If the distance on Poplar Street from F to P is 12 miles and the distance on Maple Street from E to M is 10 miles, find the distance on Maple Street, in miles, from M to P .



7. At a campground, the 50-yard path from your campsite to the information center is perpendicular to the path from the information center to the lake. The information center is located 30 yards from the bathhouse. How far is your campsite from the lake?

