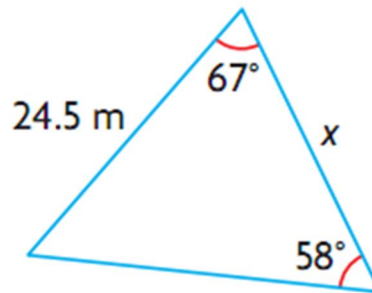


Chapter 8 – Acute Triangle Trigonometry
In-class Assignment

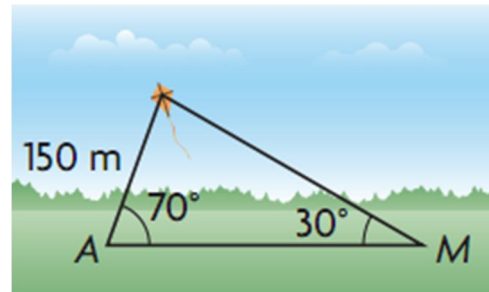
NAME _____

Solve the following problems. Make sure that your solutions are clear. Draw diagrams when needed. Label triangles when needed. Make sure your triangles are correctly labeled!

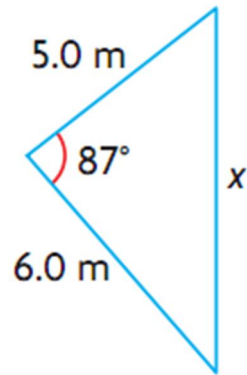
- 1) Find x



- 2) Allison is flying a kite. She has released 150m of string. She notices that that the string forms an angle of 70° with the ground. Marc is on the other side of the kite and sights the kite at an angle of elevation of 30° . How far is Marc from Allison?

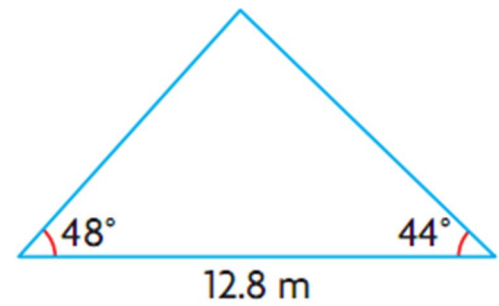


3) Find x



4) Two airplanes leave an airport at the same, but travel to different cities. One plane travels at 355 km/h . The other plane travels at 450 km/h . After two hours of flight the planes are 800 km apart. Determine the angle between their flight paths. (Draw a good diagram!)

- 5) The base of a roof is 12.8m wide (see diagram). The rafters form angles of 48° and 44° with the base. How long, to the nearest tenth of a metre, is each rafter?



- 6) **Solve** $\triangle FGH$ if $\angle F = 58^\circ$, $g = 10.0\text{cm}$, and $h = 14.0\text{cm}$.