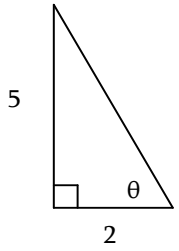
Name: _____ Date: _____

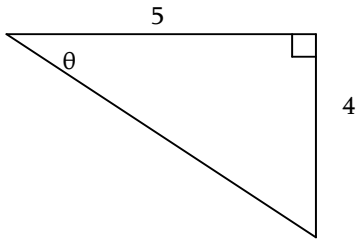
3.0 - Right Triangle Trigonometry Worksheet

1) Find the hypotenuse for each triangle, then find the three trig ratios as a fraction and decimal (to the nearest thousandth) for each triangle. Then find the unknown angle for each (to the nearest degree).

a)

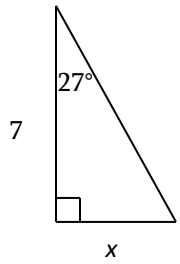


b)

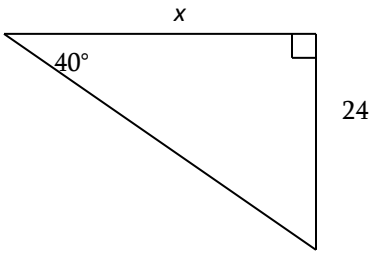


2) Find x to the nearest tenth.

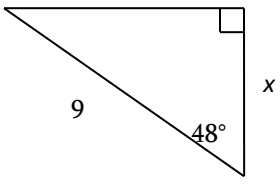
a)



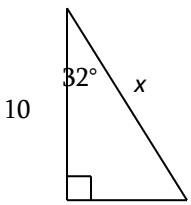
b)



c)

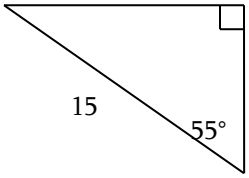


d)

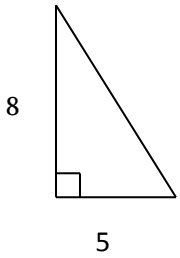


3) Solve the following triangles to the nearest tenth.

a)



b)



4) Sketch and solve ΔPQR: $<P = 46°$, $<Q = 90°$, & $q = 23$m

5) From 15m away, the angle of elevation to the top of a tree is 28°. How tall is the tree to the nearest hundredth?

6) From the top of a 67m cliff, the angle of depression to a sailboat is 30°. How far from the base of the cliff is the boat to the nearest tenth?