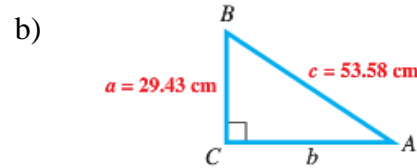
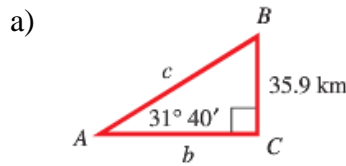


14.5 In-class Practice

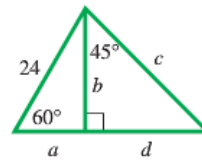
- Approximate the indicated trigonometric function values to four decimal places.
 - $\tan 35^\circ 30'$
 - $\sin(-9^\circ 15' 40'')$
 - $\cos 282^\circ 12'$
- Find all angles $\theta \in [0, 360^\circ)$ satisfying the given equation. Round the answer to one decimal place.
 - $\tan \theta = 5.3051$
 - $\sin \theta = 0.4508$
 - $\cos \theta = 0.9504$

3. Solve each right triangle. If the diagram is not given, assume that $\angle C = 90^\circ$.

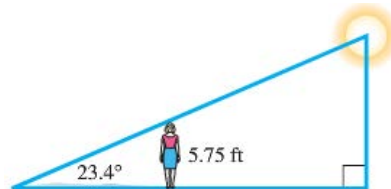


- $\angle B = 39^\circ$, $c = 125 \text{ cm}$
- $\angle A = 81^\circ$, $b = 15 \text{ m}$

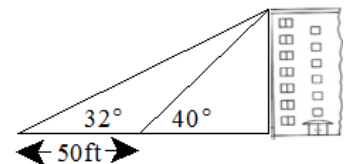
4. Find the exact value of each unknown in the figure.



- The slope of a ski hill is 0.84. Find the angle that the hill makes with the horizontal.
- Find the altitude of an isosceles triangle having a base of 184.2 cm if the angle opposite the base is $68^\circ 44'$.
- Suppose the angle of elevation of the sun is 23.4° . Find the length of the shadow cast by a person, who is 5.75 feet tall.



- A jet climbs at an angle of 36° at 362 km/h. How long will it take (to the nearest minute) to reach an altitude of 8 km?
- To measure the height of a building, two sightings are taken 50 feet apart. If the first angle of elevation is 40° and the second is 32° , what is the height of the building?



10. A circle of radius 4 inches is inscribed in a regular hexagon. Find the exact length of one of its sides.