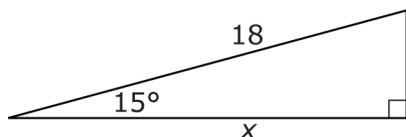


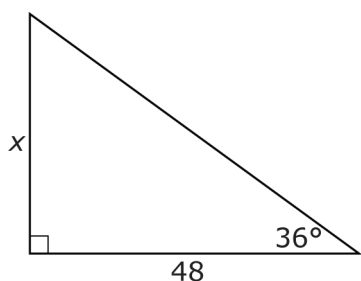
Section 7.2 Extra Practice

1. For each angle of elevation, which trigonometric ratio can be used to determine the length of the indicated side?

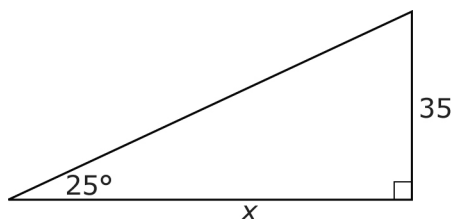
a)



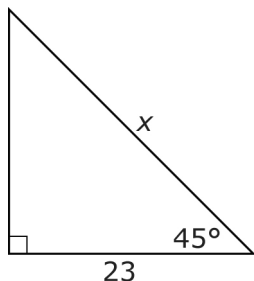
b)



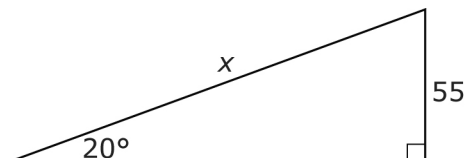
c)



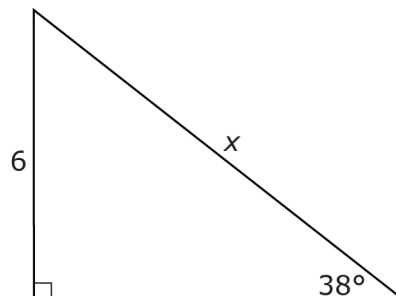
d)



e)

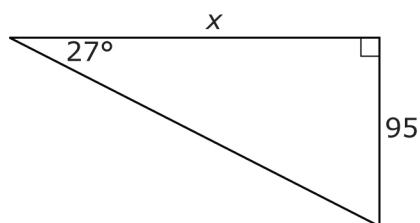


f)

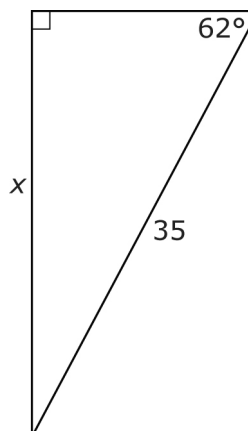


2. Determine the length of the indicated side for each triangle in #1, to the nearest unit.
3. For each angle of depression, which trigonometric ratio can be used to determine the length of the indicated side?

a)



b)

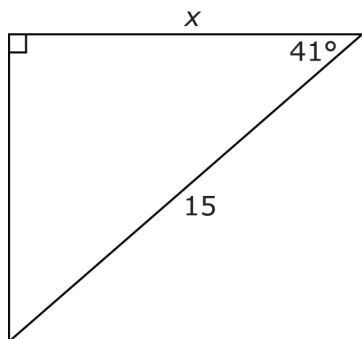


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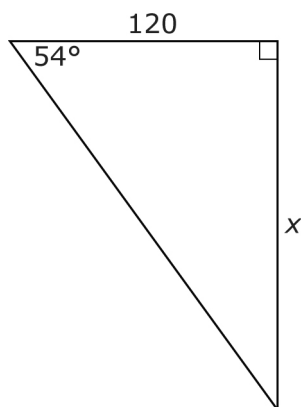
Date: _____

BLM 7-4
(continued)

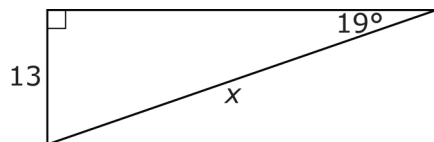
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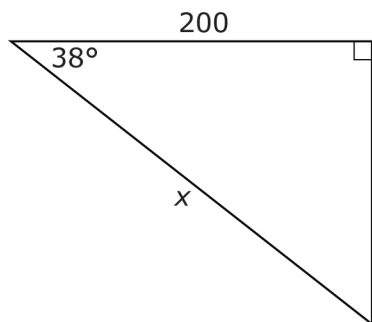
d)



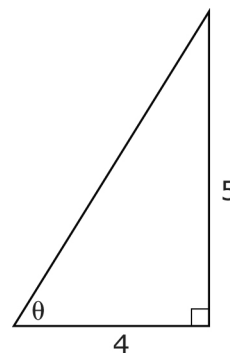
e)



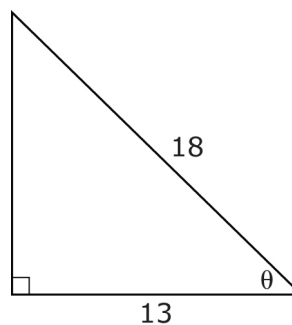
f)



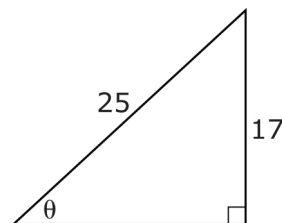
- 4.** Determine the length of the indicated side for each triangle in #3, to the nearest unit.
- 5.** Determine each angle measure, to the nearest degree.
 - a)** $\sin^{-1}(0.9659)$
 - b)** $\cos^{-1}(0.0437)$
 - c)** $\tan^{-1}(0.8191)$
 - d)** $\tan A = 2.1445$
 - e)** $\sin A = 0.1736$
 - f)** $\cos A = 0.5736$
- 6.** Which trigonometric ratio can be used to determine the measure of each indicated angle?
 - a)**

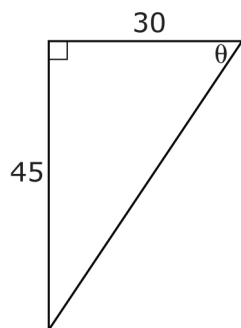


b)



c)



d)

7. Determine the measure of the indicated angle for each triangle in #6, to the nearest degree.
8. A lighthouse is 30 m high. The angle of elevation from a ship to the top of the tower is 17° . What is the horizontal distance from the ship to the lighthouse?
9. A monument casts a 16-m shadow. The angle of depression of the sun's rays is 43° . How tall is the monument?
10. From the top of a building that is 65 m high, the angle of depression of a truck on the road is 32° . How far is the truck from the foot of the building, to the nearest metre?
11. A ramp is 12 m long and has a height of 1.5 m. What is the angle of elevation of the ramp, to the nearest degree?
12. An empty swimming pool is 20 m wide.
- a) The angle of depression across the shallow end is 4° . Determine the depth of the shallow end, to the nearest tenth of a metre.
- b) Determine the angle of depression across the pool at the 10-m deep end, to the nearest degree.

