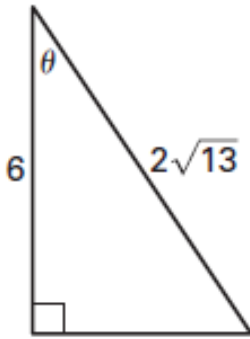
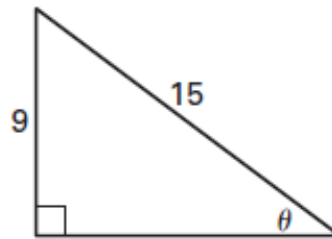


Evaluate the six trigonometric functions of the angle  $\theta$ .

1.



2.



Let  $\theta$  be an acute angle of a right triangle. Find the value of the other five trigonometric functions of  $\theta$ .

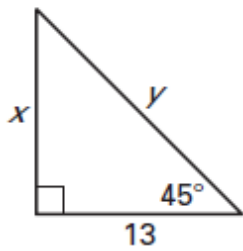
3.  $\sin \theta = \frac{\sqrt{2}}{2}$

4.  $\tan \theta = \frac{5}{8}$

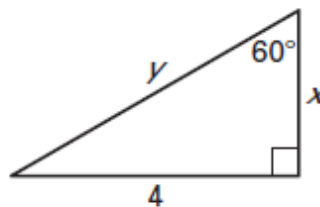
5.  $\sec \theta = \sqrt{5}$

Find the exact values of  $x$  and  $y$ .

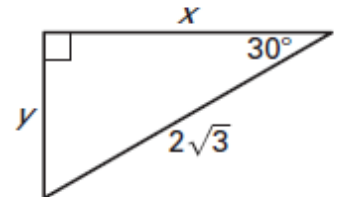
6.



7.

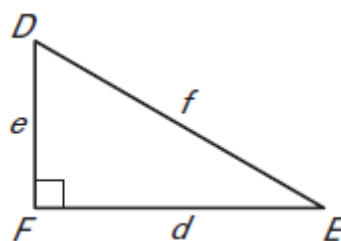


8.

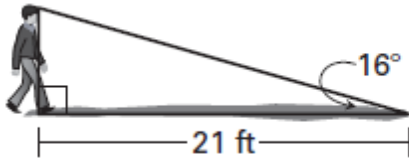


Solve  $\triangle DEF$  using the diagram and the given measurements.

9.  $E = 53^\circ, d = 13$

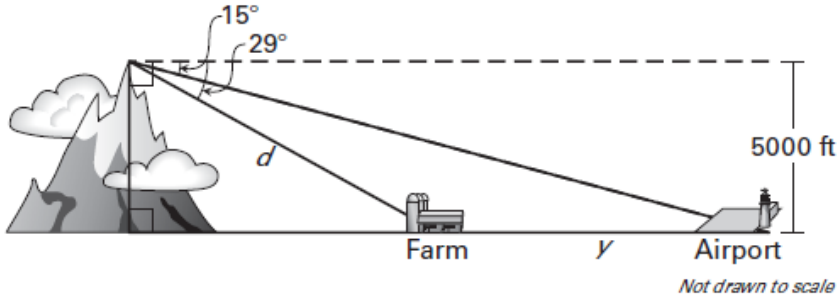


10. A person casts the shadow shown. What is the approximate height of the person?



11. A hiker at the top of a mountain sees a farm and an airport in the distance.

- What is the distance  $d$  from the hiker to the farm?
- What is the distance  $y$  from the farm to the airport?



12. Draw an angle with the given measure in standard position.

- $135^\circ$
- $\frac{\pi}{4}$
- $-\frac{\pi}{3}$

13. Find one positive angle and one negative angle that are coterminal with the given angle.

- $90^\circ$
- $-60^\circ$
- $\frac{3\pi}{4}$
- $-\frac{7\pi}{6}$

14. Convert the degree measure to radians or the radian measure to degrees.

- $120^\circ$
- $-225^\circ$
- $-\frac{2\pi}{3}$
- $\frac{5\pi}{4}$