

● Lesson 13-2 Sketch each angle in standard position.

4. 15°



5. -230°

6. 400°

7. -145°



9. -750°



● Lesson 13-3 Write each measure in radians. Round to the nearest tenth.

10. $100^\circ \frac{5\pi}{9}$

11. $270^\circ \frac{3\pi}{2}$

12. $-45^\circ -\frac{\pi}{4}$

13. $-55^\circ -\frac{11\pi}{18}$

14. $425^\circ \frac{85\pi}{36}$

15. $10^\circ \frac{\pi}{18}$

● Lesson 13-3 Write each measure in degrees. When necessary, round your answer to the nearest degree.

16. 5π radians 900°

17. -2 radians -115°

18. $\frac{5\pi}{6}$ radians 150°

19. -3π radians -540°

20. $-\frac{13\pi}{10}$ radians -234°

21. 9 radians 516°

The measure θ of an angle in standard position is given.

a. Write each degree measure in radians and each radian measure in degrees rounded to the nearest degree.

b. Find the exact values of $\cos \theta$ and $\sin \theta$ for each angle measure.

12. 60° a. $\frac{1}{2}$ b. $\frac{\sqrt{3}}{2}$

13. -45° a. $-\frac{\sqrt{2}}{2}$ b. $\frac{\sqrt{2}}{2}$

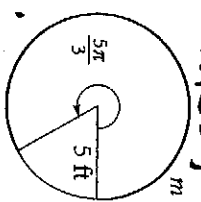
14. 180° a. π b. $-1, 0$

15. 2π radians a. 360° b. $1, 0$

16. $\frac{5\pi}{6}$ radians a. 150° b. $-\frac{\sqrt{3}}{2}, \frac{1}{2}$

17. $-\frac{3\pi}{4}$ radians a. -135° b. $-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}$

18. Use the circle to find the length of the indicated arc. Round your answer to the nearest tenth.



- Find the measure of an angle between 0° and 360° coterminal with the given angle.
- 3. -32° 4. -229° 5. 375°
 - 328° 131° 15°

● Lesson 14-3 In $\triangle ABC$, $\angle C$ is a right angle. Find the remaining sides and angles.

Round your answer to the nearest tenth. $b = 5.7$ $\angle A = 51.1^\circ$ $\angle B = 38.9^\circ$

18. $m\angle A = 29^\circ$, $b = 8$ $c = 9.1$

19. $a = 7$, $c = 9$

20. $m\angle B = 52^\circ$, $b = 10$

21. $a = 2$, $b = 4$ $\angle B = 61^\circ$, $\alpha = 4.4$

22. $m\angle A = 37^\circ$, $c = 12$

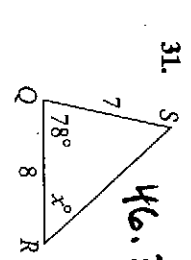
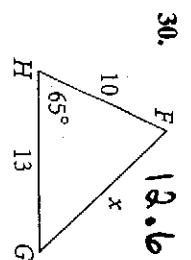
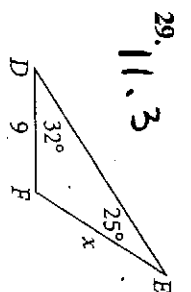
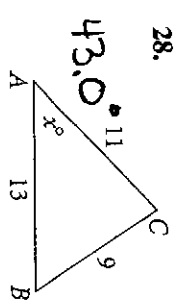
23. $b = 5$, $c = 8$

$c = 4.5$ $\angle A = 26.6^\circ$ $\angle B = 63.4^\circ$

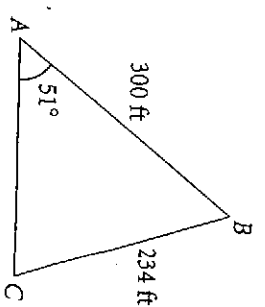
$\angle B = 53^\circ$ $\alpha = 7.2$ $b = 9.6$

$\angle A = 38^\circ$ $a = 7.8$ $c = 12.7$

● Lessons 14-4 and 14-5 Use the Law of Sines or the Law of Cosines. Find the measure x to the nearest tenth.



54. A landscaping company received a rough sketch of a triangular property from the property owner. The sketch, shown at the right, is not to scale. The owner is asking for a price quote to sod the land. Sod costs \$2 per square foot. Can the landscaper estimate the cost of the job using the information provided? If so, find the estimate. If not, explain what information is missing. **NO, do not know if acute**



51. Two buildings on level ground are 200 feet apart. From the top edge of the shorter building, the angle of elevation to the top of the taller building is 24° , and the angle of depression to the bottom of the taller building is 35° . How tall is each building? Round to the nearest foot.

140 ft
229 ft