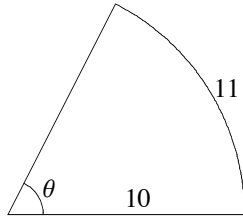


Write the letter of the correct answer in the blank on the left.

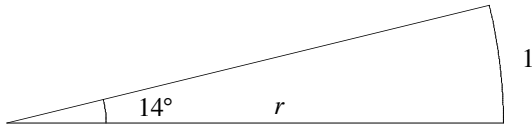
_____ 1. Find the degree measure of the angle θ .

- a) 55° b) 72° c) 68° d) 59° e) 63°



_____ 2. Find the radius r of the circular arc.

- a) 4.1 b) 4.7 c) 3.9 d) 4.8

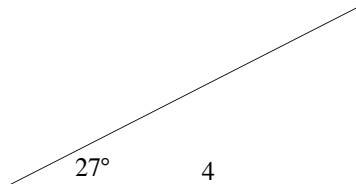


_____ 3. Convert 100° to radians.

- a) $\frac{2\pi}{3}$ b) $\frac{5\pi}{6}$ c) $\frac{9}{5}\pi$ d) $\frac{5\pi}{9}$

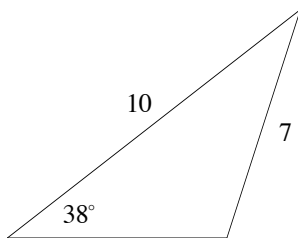
_____ 4. Find the length of the hypotenuse in the given right triangle.

- a) 4.3 b) 4.5 c) 4.7 d) 4.8



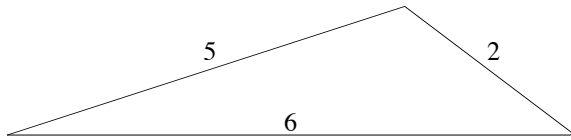
_____ 5. Find the *obtuse* angle in the given oblique triangle.

- a) 61.6° b) 118° c) 99.7° d) 112° e) 102°



_____ 6. Find the *smallest* angle in the given oblique triangle.

- a) 24° b) 16.5° c) 22° d) 18° e) 27°



_____ 7. Which of these angles is coterminal with $\theta = \frac{17\pi}{5}$?

- a) $\frac{2\pi}{5}$ b) $-\frac{2\pi}{5}$ c) $-\frac{3\pi}{5}$ d) $\frac{\pi}{5}$

_____ 8. Find the reference angle for $\theta = \frac{10\pi}{7}$.

- a) $\frac{4\pi}{7}$ b) $\frac{\pi}{7}$ c) $-\frac{3\pi}{7}$ d) $\frac{3\pi}{7}$

_____ 9. Find the smallest negative angle that is coterminal with $\theta = \frac{8\pi}{3}$.

- a) $-\frac{4\pi}{3}$ b) $-\frac{\pi}{3}$ c) $-\frac{7\pi}{6}$ d) $-\frac{5\pi}{6}$

_____ 10. The angle θ is in standard position and its terminal side goes through the point $(3, \sqrt{7})$. Find $\cos \theta$.

- a) $\frac{3}{\sqrt{7}}$ b) $\frac{3}{16}$ c) $\frac{\sqrt{7}}{4}$ d) $\frac{3}{4}$

_____ 11. Find $\cos \theta$ if $\tan \theta = 2\sqrt{2}$ and θ is a fourth quadrant angle.

- a) $\frac{1}{3}$ b) $-\frac{2\sqrt{2}}{3}$ c) $-\frac{\sqrt{3}}{4}$ d) $\frac{2\sqrt{2}}{3}$ e) $-\frac{1}{3}$

_____ 12. Find θ if $\sin \theta = \frac{1}{2}$ and θ is a second quadrant angle.

- a) $\frac{\pi}{6}$ b) $\frac{5\pi}{6}$ c) $\frac{2\pi}{3}$ d) $\frac{\pi}{3}$ e) $\frac{3\pi}{4}$

_____ 13. In what quadrant is the terminal side of $\theta = \frac{23\pi}{6}$?

- a) Q1 b) Q2 c) Q3 d) Q4

_____ 14. Find the exact value of $\cos \frac{\pi}{2} + \sin \frac{2\pi}{3} + \cos \frac{3\pi}{4} + \sin \pi$.

- a) $\frac{\sqrt{3} - \sqrt{2}}{2}$ b) $\frac{\sqrt{3} - 1}{2}$ c) $\frac{1 + \sqrt{3}}{2}$ d) $\frac{\sqrt{2} - 1}{2}$ e) $\frac{1}{2}$