

Problem 1. Find the radian measure of 184° .

Problem 2. Find the degree measure of $\frac{22\pi}{15}$.

Problem 3. If $\tan \theta = \sqrt{3}$ and $0 \leq \theta \leq \frac{\pi}{2}$, what is θ (in radians)?

Problem 4. If $\tan \theta = \frac{7}{11}$, what is $\sin \theta$?

Problem 5. A baby groundhog bravely leaves her hole, cautiously crawls west for 4 meters, then sees an owl, becomes terrified and in a blind panic, runs south for 9 meters. How far is she from her hole?

Problem 6. Find the reference number (in degrees) of $x = -1234^\circ$.

Problem 7. Find the reference number (in radians) of $t = \frac{41\pi}{3}$.

Problem 8. Find the terminal point $W(t)$ determined by $t = \frac{11\pi}{3}$.

Problem 9. Find $W\left(-\frac{41\pi}{6}\right)$.

Problem 10. Jane and Michael are flying a kite. The string is 300 feet long, and the angle the string makes with the ground is 36° . How high is the kite?