

Quiz 5

1. [1] TRUE/FALSE: Circle T in each of the following cases if the statement is *always* true. Otherwise, circle F. Let x , y , and z be a real numbers.

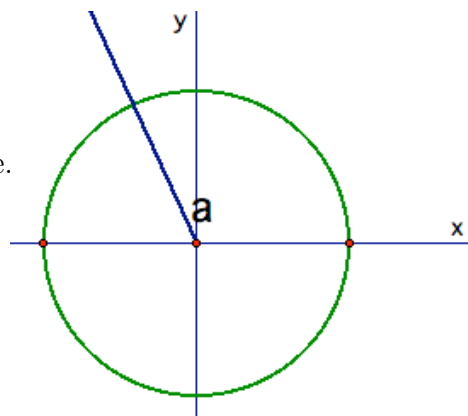
T F $(\sin x)^2 + (\cos x)^2 = 1$

T F $\sin(u + v) = \sin(x) + \sin(y)$

Show *all* your work algebraically for each and simplify. No credit is given without supporting work. There are *two* sides to this quiz.

2. [1] Find an angle that is coterminal with $\frac{31\pi}{15}$.

3. [2] (WebHW12 #1) Consider the angle pictured here. The angle a is an integer when measured in radians. Give the radian measure of the angle.



4. [3] (Circles & Angles Wks) Find the point(s) on the unit circle whose first coordinate is $\frac{-2}{3}$.

5. [3] (§5.3 #24) If $\cos \theta = \frac{-2}{3}$ and θ is between π and 2π , find $\cos \theta$