

Math 1613 - Trigonometry

Quiz #12 - 2011.09.27

Solutions

1. When attempting to verify trigonometric identities, explain why are you not allowed to add the same value to both sides of the equation, or multiply both sides of the equation by the same value.

Since we are not sure that the equation is correct in the first place, one cannot perform these operations. In other words, we must modify only one side, which in itself gives a string of equalities which will hopefully end up looking like the desired second expression.

2. Sketch the graph of $f(x) = 2 + \frac{1}{2} \tan\left(\frac{x}{2} - \frac{\pi}{3}\right)$ over at least one period.

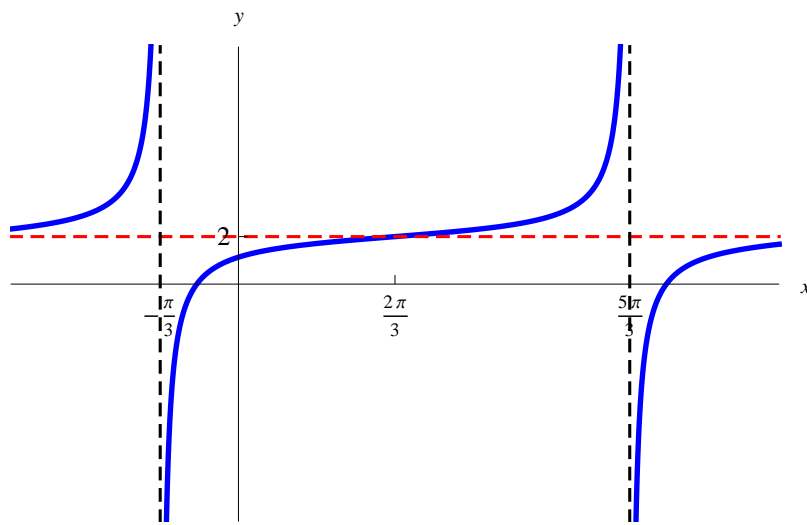


FIGURE 1. The graph of $f(x)$ over one period.