Math 133 - Quiz 0

Name: _____

1. [T] [F] $\sqrt{a^2+b^2} = a+b$, for all a, b.

2. [T] [F] $\dfrac{a+b}{b} = a$, for all a and b.

3. [T] [F] $\sqrt{0}$ is not defined.

4. [T] [F] $2x + y = 2(x+y)$, for all x and y.

5. [T] [F] If $x^2 = 4$, then $x = 2$.

6. [T] [F] $\sqrt{4} = \pm 2$.

7. [T] [F] $(a-b)^2 = a^2 - b^2$, for all a and b.

8. [T] [F] $\frac{ab+1}{a} = b+1$, for all a and b.

9. [T] [F] $\sqrt{x^2} = x$, for all x.

10. [T] [F] $\sqrt{x+y} = \sqrt{x} + \sqrt{y}$, for all x and y.

11. [T] [F] $\dfrac{0}{0} = 0$.

12. [T] [F] $\dfrac{2}{3} + \dfrac{1}{4} = \dfrac{3}{7}$.

13. Evaluate the followings:

    $\sin(0)$

    $\cos(0)$

    $\log 1$

    $\ln(1)$

14. Find an equation of the line joining $(2, 1)$ and $(3, 2)$?

15. If $f(x) = \dfrac{2}{x-1}$ what is the inverse function $f^{-1}(x)$?

16. Draw the graph of the function $f(x) = \dfrac{5}{x-1} + 3$

17. Find all the roots of $\sin(\dfrac{\pi}{x})$