MAT 151 Quiz 12

Apr. 14, 2020

1. [26T] Find the equation of a circle whose center is at $(2, -3)$ with radius 12.

2. [25T] Calculate the arc length that is cut out by an angle of $345°$ in the circle from Question (1).

3. [27T] If $\cos(\alpha) = -3/4$ and α is in the second quadrant, compute $\tan(\alpha)$. Show all work.

4. [24T] Convert 160° to radian.

5. [17F] Find the inverse function of $y = \sqrt{x^2 + 5}$. Make sure to include the domain and the range of the inverse function.

For the next question, use the function $g(x) = \dfrac{3 - x + x^2}{2x^2 + x - 6}$.

6. [19F] Find the vertical and horizontal asymptotes of $g(x)$.

7. [4Q] Solve the quadratic equation $2x^2 - x - 4 = 3$. (You can leave your answers in decimals.)