solve

1. If f(x) =7x + 11 and g(x) =5x- 1, find f(g(x)). What is f(g(2))?
2. Find the average rate of change of the function shown below over the given interval. y=- - x, [5, 6]
3. Find the limit, if it exists.
4. Find an equation for the tangent to the curve at the given point. y=- x, (-4,20)
5. Calculate the derivative of the function. Then find the value of the derivative as specified. f(x)= + 7x- 2; f (0)
6. Solve. Find the point where the graph of the function has a horizontal tangent. f(x)=+ 5x+ 2
7. Find all points "x" where the function whose graph is shown below is discontinuous.



1. A function f(x), a point c, the limit of f(x) as x approaches c, and a positive number ɛ is given. Find a number δ> 0 such that for all x,0<|x – c|<δ ⟶ |f(x)- L| <ɛ.

 f(x)=5x+ 9, L=29, c=4, and ɛ= 0.01

1. Use the graph of the function f(x) to evaluate the limit, or state that the limit does not exist.



1. Find an equation of the line passing through the given point and parallel to the graph of the function shown. Write the equation using function notation. 10) Through (7,3); parallel to f(x)=4x- 6