
```

format long
disp("3.1.31 Finding slope of a point")
disp("For the function: ")
syms x
f = (x^2) / (1 + sqrt(x));
disp("f(x) = ")
disp(f)
disp("The derivative is: ")
fprime = diff(f);
disp("f'(x) = ")
disp(fprime)
disp("If we replace x with 2 and round to 5 decimals")
disp("we get our answer")
fprime = @(x) (2*x) / (x^(1/2) + 1) - x^(3/2)/(2*(x^(1/2) + 1)^2);
disp(round(fprime(2),5))

```

3.1.31 Finding slope of a point

For the function:

f(x) =
 $x^2/(x^{1/2} + 1)$

The derivative is:

f'(x) =
 $(2x)/(x^{1/2} + 1) - x^{3/2}/(2(x^{1/2} + 1)^2)$

If we replace x with 2 and round to 5 decimals

we get our answer
 1.414210000000000

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