

SHEET # 181: = USING TABLES TO FIND LIMITS

1-8 ADDITIONAL QUESTIONS = 11, 16, page 55 in CSV.

USE $Y_1(X)$ ON CALCULATOR. **VARS** \triangleright Y-VARS \triangleright 1:FUNCTION... $Y_1=$

11. $f(x) =$ 16. $f(x) =$

$x^2 - 9$ $(x^2 - 9)$

$\sin(2x) / x$ $(x-3)$

NINE DECIMALS EXACTLY

-0.1	3-0.1	2.9	
-0.01	3-0.01	2.99	
-0.001	3-0.001	2.999	
0	3	3	
0.0001	3+0.0001	3.0001	
0.001	3+0.001	3.001	
0.01	3+0.01	3.01	
0.1	3+0.1	3.1	

b, CONJECTURE =

$\lim_{x \rightarrow 0} f(x) =$

b, CONJECTURE =

$\lim_{x \rightarrow 3} f(x) =$

c, GRAPH.

d, FIND δ SUCH THAT $\epsilon = 0.01$, FIND δ SUCH THAT $\epsilon = 0.01$.

e, FOR 11 AND 16, FIND THE LIMIT ALGEBRAICALLY, ASSUMING $\lim_{x \rightarrow 0} \frac{\sin(x)}{x} = 1$.

e, FOR 11 AND 16, FIND LIMIT ALGEBRAICALLY. USE TABLES OR BACK OF SHEET. WINDOW HEIGHT = 28 = 0.02.