

# Practice Quiz      Math 131      Fall 2019

Name: \_\_\_\_\_

Content: This practice quiz covers sections 1.1, 1.2 and 1.3.

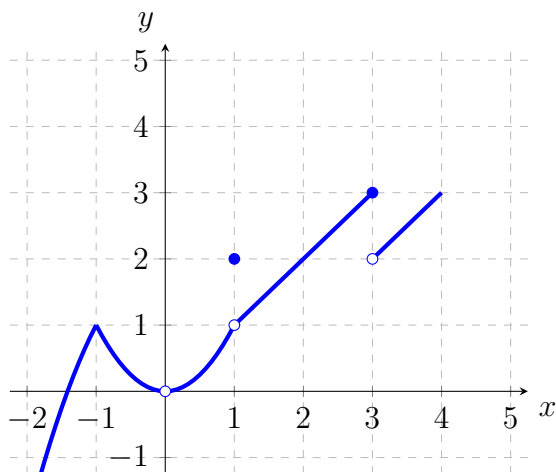
- Estimate the slope of a curve at a point using a graph.
- Evaluate limits using a graph.
- Explain the difference between limits, left limits, and right limits.
- Use numerical and graphical methods to estimate limits of functions.
- Evaluate limits of polynomials, rational functions, trig functions, exponential functions, logarithmic functions, and piece-wise functions.
- Evaluate limits of the product and quotient of functions.

Directions:

- You have 15 minutes to complete this quiz.
- You are allowed one hand-written sheet of notes on regular 8.5-11 paper, front and back.
- You are allowed a non-graphing calculator.
- Show all of your work.
- If you have any questions, raise your hand.

Question	Points	Score
1	9	
2	5	
Total:	14	

1. (9 points) Compute the limits using the graph of  $f(x)$ . If the limit does not exist write *DNE*.



1.  $\lim_{x \rightarrow 0^+} =$  \_\_\_\_\_

4.  $\lim_{x \rightarrow 1^+} =$  \_\_\_\_\_

7.  $\lim_{x \rightarrow 3^+} =$  \_\_\_\_\_

2.  $\lim_{x \rightarrow 0^-} =$  \_\_\_\_\_

5.  $\lim_{x \rightarrow 1^-} =$  \_\_\_\_\_

8.  $\lim_{x \rightarrow 3^-} =$  \_\_\_\_\_

3.  $\lim_{x \rightarrow 0} =$  \_\_\_\_\_

6.  $\lim_{x \rightarrow 1} =$  \_\_\_\_\_

9.  $\lim_{x \rightarrow 3} =$  \_\_\_\_\_

2. (5 points) Evaluate the limit if it exists.

$$\lim_{x \rightarrow -2} \frac{x^2 + x - 2}{x + 2}.$$