

Today's Plan:

Learning Target (standard): I will evaluate limits.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, and take a test over limits.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide test problems.

Assessment: Board work, homework check and test

Differentiation: Students will work at the board, go over and correct homework at their seats, and actively engage in test problems.

Assignment 4 #1-29

1) -13

2) $2a$

3) $-\frac{1}{5}$

4) 0

5) $\frac{5}{13}$

6) 3

7) DNE

8) 4

9) DNE

10) 1

11) -6

12) 5

13) 32

14) 5

15) 0

16) 5

18) 1

19) DNE

* skip #17,22 & 27

20) 0

21) $\frac{3}{5}$

23) -3

24) 5

25) 1

26) 1

28) $DNE, 2, DNE$

29) $2, 1, 0$

Evaluate:

$$\begin{aligned}
 \lim_{x \rightarrow \infty} \frac{\sqrt{x^2 - 4x + 5}}{x^2} &= \lim_{x \rightarrow \infty} \frac{\sqrt{\frac{x^2}{x^4} - \frac{4x}{x^4} + \frac{5}{x^4}}}{\frac{x^2}{x^2}} \\
 &= \lim_{x \rightarrow \infty} \frac{\sqrt{\frac{1}{x^2} - \frac{4}{x^3} + \frac{5}{x^4}}}{1} \\
 &= \frac{\sqrt{0 - 0 + 0}}{1} \\
 &= 0
 \end{aligned}$$