

Math 1314 Online

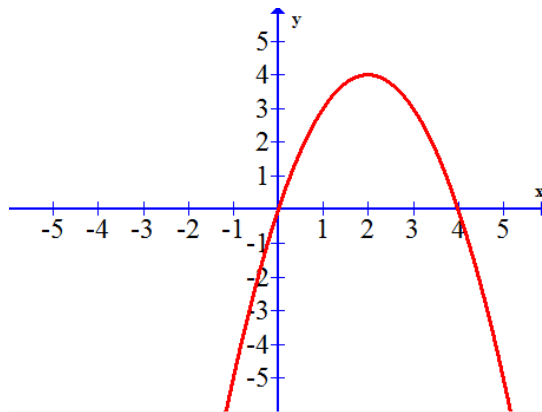
Popper – Week 4, first session

You will need to watch the video to be able to do most of these!

Popper 4, questions 1 – 5, will be open until 11:59 p.m. on Monday, Feb 4, 2013.

POPPER4, problem 1:

Find $\lim_{x \rightarrow 2} f(x)$ using the graph shown below:



- A. 0 B. 2 C. 4 D. 1 E. 5

Popper 4, problem 2:

Which of these statements is true of this problem?

$$\lim_{x \rightarrow 2} \frac{x^2 - 7x + 10}{x^2 - 3x + 2}$$

- A. The limit does not exist.
B. This problem is given in an indeterminate form.
C. The answer to this problem can be found by substitution, with no additional work needed.

Popper 4, problem 3:

Evaluate: $\lim_{x \rightarrow 2} \frac{x^2 - 7x + 10}{x^2 - 3x + 2}$

- A. dne B. 0 C. 1 D. -3 E. 3

Popper 4, problem 4:

Suppose $f(x) = \begin{cases} 2x^2 - 3x + 1, & x > 2 \\ x^2 - 2x + 4, & x \leq 2 \end{cases}$. Find $\lim_{x \rightarrow 2} f(x)$.

- A. 3 B. 4 C. 2 D. does not exist E. 0

Popper 4, problem 5:

Which of these statements is true of $f(x) = \begin{cases} 2x^2 - 3x + 1, & x > 2 \\ x^2 - 2x + 4, & x \leq 2 \end{cases}$?

- A. The graph of the function is continuous at $x = 2$.
B. The graph of the function has a removable discontinuity at $x = 2$.
C. The graph of the function has a jump discontinuity at $x = 2$.
D. The graph of the function has an infinite discontinuity at $x = 2$.