



Tutorial Request Form (TRF)
Pre-Work Inquiry (Before the Tutorial)

Subject: Precalc
Unit/Essential Question:
Complex Numbers

Name: ~~XXXXXXXXXX~~
AVID Period: 3
Date: 10.19.15

18

| Pre-work Inquiry | Resources | Collaborative Inquiry | Note-Taking | Reflection | Total |
|------------------|-----------|-----------------------|-------------|------------|-------|
| /12 | /1 | 2/2 | 3/3 | /7 | /25 |

Initial/ Original Question: Perform the operation and write the result in standard form.
 $\frac{2}{1+i} - \frac{3}{1-i}$

Source, page # & problem #: 55

/1

Key academic vocabulary/definition or formulas associated with question:
1. $i = \sqrt{-1}$
2. Standard form: $a + bi$ (real numbers are written before imaginary)

/2

Background Knowledge About Topic/Question
1. multiply by conjugate
2. must be the same number under the $\sqrt{\quad}$ in order to +/-

/2

Critical Thinking & Brainstorming
in order to get same number under square root I multiplied by the conjugate by both sides to solve and then simplified my answer and wrote it with real number before imaginary OR standard form.

/3

General Process and Steps:
$$\frac{(1-i)2}{(1-i)(1+i)} - \frac{3}{1-i} \left(\frac{1+i}{1+i} \right)$$

$$\frac{2-2i}{1-(-1)} - \frac{3+3i}{1-(-1)}$$

$$\frac{-1-5i}{2}$$

/2

SPECIFIC Question from Point of Confusion:
How do I solve +/- problems that don't have the same denominators?

/2