

Effectively Explain and/or Correct

1. These problems are done correctly. Explain in detailed written form (do not primarily use algebraic symbols) the process used to solve each problem.

a. Simplify the following expression: $\frac{x^3+x^2-22x-40}{x^2+6x+8}$
(Correct work would be shown here)

- b. Write a possible quantic equation, with a bounce point at $x = 2$, a pass through at $x = -5$, and passes through $(3, -3)$.
(Correct work would be shown here)

2. These problems are done incorrectly, point out the area that was incorrect and correct the problem with written explanation.

a. Solve for z : $(5 - 2i)z + (2 + 5i) = 6 - 3i$
(Incorrect work would be shown here)

b. Find the vertex using completing the square: $y = 4x^2 + 2x - 5$
(Incorrect work would be shown here)

Effectively Critiquing Work

Standard: N.CN.1 - Perform arithmetic operations with complex numbers.

N.CN.8 - Extend polynomial identities to the complex numbers. *For example, rewrite $x^2 + 4$ as $(x + 2i)(x - 2i)$.*

A.APR.6 - Rewrite simple rational expressions in different forms; write $\frac{a(x)}{b(x)}$ in the form $q(x) + \frac{r(x)}{b(x)}$, where $a(x)$, $b(x)$, $q(x)$, and $r(x)$ are polynomials with the degree of $r(x)$ less than the degree of $b(x)$, using inspection, long division, or, for the more complicated examples, a computer algebra system.

Students will be able to effectively critique work.

Task: Students will either explain in detail the process used to solve a problem if that problem was done correctly or correct a problem done incorrectly with explanation.

Criteria:

- If the problem was done correctly explain in detail the process used to solve the problem
- If the problem was done incorrectly point out the area that was incorrect and correct the problem with explanation
- The corrections/explanation was done orderly and tactfully

Rubric: (for each problem)

Criteria	0 points	1 point	2 points
If the problem was done correctly explain in detail the process used to solve the problem	No Explanation given	Explanation given but not correct	Explanation given correctly
If the problem was done incorrectly point out the area that was incorrect and correct the problem with explanation	No correction made nor explanation given	Correction and/or explanation given but incorrectly	Explanation and correction done correctly
The explanation and or corrections was done orderly and tactfully	No order or tact in explanation/correction	Limited in either or both the order and tact of the explanation/correction	Explanation/correction done in an orderly and tactful way