Accuplacer Study Modules

Topic: Divide Polynomials

Khan Academy Link: https://www.khanacademy.org/math/algebra2/arithmetic-with-polynomials/long-division-of-polynomials/v/polynomial-division

Steps to Divide Polynomials:

Step 1: Divide the first term of the numerator by the first term of the denominator, and put that in the answer.

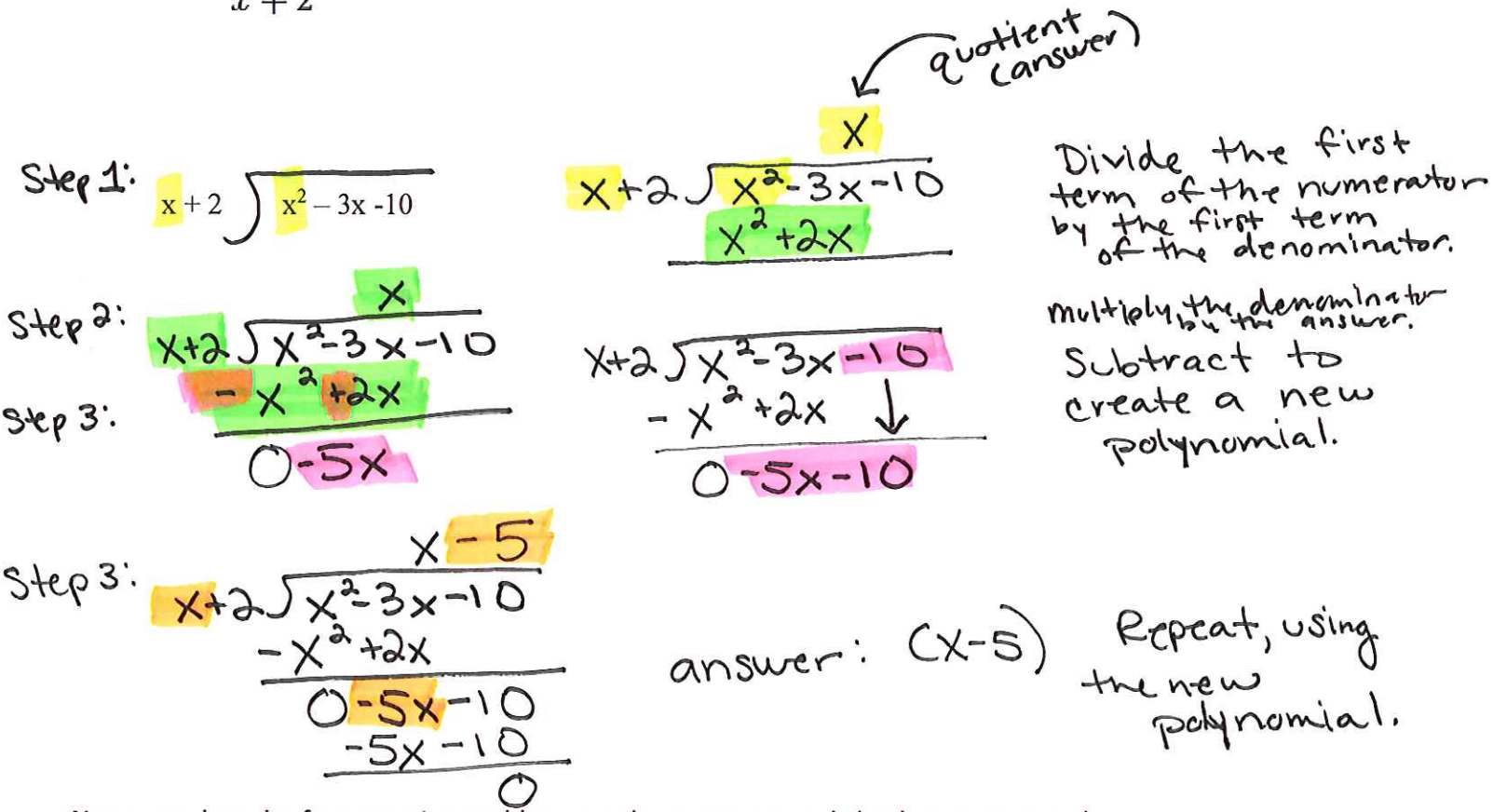
Step 2: Multiply the denominator by that answer, put that below the numerator

Step 3: Subtract to create a new polynomial

Step 4: Repeat, using the new polynomial

Example:

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



Now complete the four practice problems on the next page and check your answers!

1. Divide $x^2+ 2x -8$ by $(x-2)$.	2. A rectangle has an area of $2x^2- 5x - 1$ and a length of $(x-3)$. What is the width of the rectangle?
3. Divide $x^6 + 2x^4 + 6x -9$ by $(x^3+ 3)$	4. A rectangle has an area of $x^2+ 2x - 15$ and a width of $(x+ 5)$. What is the length of the rectangle?