

Take A Chance (Red, Blue and Purple)

1. Been There, Done That! You have had experience factoring in your previous math classes.

a. How would factoring relate to multiplication? How does it relate to division?

b. Use factoring to find $(x^2 + x - 20) \div (x - 4)$

c. Use factoring to find $(6x^2 + x - 2) \div (2x - 1)$

2. Been There, Done That! You have also learned to use long division to divide polynomials.

a. Use long division to divide $(2x^5 + 5x^4 + 7x^3 + 2x^2 - x + 3)$ by $(x^2 + 2x + 3)$

b. Notice the role of the variables in the long division. Do you think they are necessary? Could you use only the coefficients instead? Why or why not?

