5.5 Multiplying and Dividing a Polynomial by a Constant

* Use different strategies to multiply and divide a polynomial by a constant.

We use the Distributive Property (which looks like this):

We know that when we see brackets this indicates that we will be multiplying. We can also see that in question a) there are 2 terms inside the bracket. This means we need to multiply twice.

a)

In question b) there are terms inside the bracket (it’s a trinomial). That means we are going to be multiplying three times.

b)

You try:

c)

Dividing a Polynomial by a Constant

Ex: You can see that the numerator is a binomial. So, there are two terms on top. We need to divide twice.

You can think of the expression above as the sum of two fractions:

You try: \*\*Remember your integer rules!