

## Transcript – Developing Fluency

Review the factoring, multiplication, and division examples.

Using strategies such as the ones we've just explored for multiplying polynomials helps students build upon prior knowledge related to the properties of operations. These strategies also help to develop mental constructs for the building blocks of algebraic properties. Automaticity is developed by studying basic facts and examining and using relationships between facts. This is the first building block for “algebraic reasoning,” including taking pieces apart, working with them, putting them back together, thinking about the meaning of operations, and developing number sense. When algebraic reasoning is extended beyond basic facts, it allows for mindful manipulation within problems. It also allows for connections to be made between algebra and geometry. How could we take the strategies from the open array methods and extend them to algebraic expressions?

As we saw in the activities, we apply the strategy of breaking polynomials apart and using the distributive property to multiply polynomials together.

It should be noted that the use of strategies also applies to other concepts and operations. For the purpose of this module, we have focused on multiplication.