5.1

Modelling Polynomials

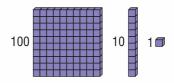
FOCUS

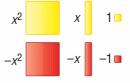
 Model, write, and classify polynomials. In arithmetic, we use Base Ten Blocks to model whole numbers. How would you model the number 234?

In algebra, we use algebra tiles to model integers and variables.

Yellow represents positive tiles. Red represents negative tiles.

How are Base Ten Blocks and algebra tiles alike?





2 🥊

Investigate



Use algebra tiles.

➤ Model each expression. Sketch the tiles. How do you know which tiles to use? How do you know how many of each tile to use?

•
$$x^2 + x - 3$$

•
$$-2x^2 - 3$$

•
$$2x^2 + 3x$$

•
$$-2x^2 - 3x + 1$$

•
$$-3x + 3$$

➤ Write your own expression. Have your partner model it with tiles. Model your partner's expression with tiles.



For the first activity, compare your sketches with those of another pair of students.

Did you use the same tiles each time? If not, is one of you wrong? Could both of you be correct? Explain.

Did the order in which you laid out the tiles matter? Explain.