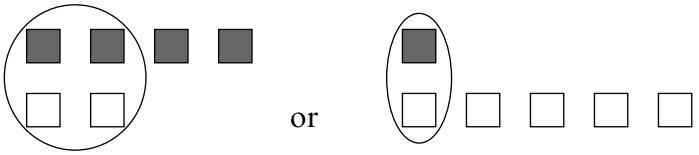
Planning Notes

Get Ready

- Before starting, have students practise adding integers using manipulatives. Review how to use zero pairs to determine the sum.
  For example,



$4 + (-2) = 2$ or $1 + (-5) = -4$

- As a class, review methods for finding the unknown, such as reverse order of operations (reverse addition or subtraction, then multiplication or division) and guess and check.
- Provide students with equations such as the ones below. In pairs, have them determine the unknown.

$2 \times \square + 3 = 1$ $\square \div 4 - 7 = 2$

- Provide students with **BLM 8–1 Chapter 8 Problems of the Week** at the beginning of the chapter. Discuss the solutions with the class as you progress through the chapter. Alternatively, use this blackline master as a review exercise at the end of the chapter. Have students try at least one question. Many of these problems require students to think creatively and try a variety of approaches. Students can take these problems home or work in class with other students when time permits.

Math Link

- Remind students that they can show division with a division sign or a fraction.
- Review how to write various expressions algebraically. For example,
  – a number increased by 2 $\rightarrow (x + 2)$
  – triple the number of baskets $\rightarrow (3b)$
  – half of a number $\rightarrow \left(\frac{x}{2} \text{ or } \frac{1}{2}x\right)$
- Using various examples, show students how $\frac{1}{3}$ of a number is the same as dividing the number by 3. Do the same with $\frac{1}{4}$.

Foldable

- The shutter door design of this Foldable provides the framework for smaller shutter folds with tabs for the different types of equations that students will solve in the chapter.
- The front left shutter provides a review of opposite operations and the distributive property. Review these concepts and ask students to include several of their own examples to ensure they understand.
- The inside of the Foldable has three shutter folds, each with three tabs. Each set of tabs relates to equations that progress through one-step, two-step, and multi-step solutions. Below each equation, have students write their own example of an equation that models that particular form. Under the tab, students should solve the equation showing all their steps. They can use the blank side of each tab to verify each solution. Students should proceed through each tab as they learn how to solve each type of equation.
- Encourage students to exchange Foldables with a partner, solve their partner's equation, and compare solutions.
- Use a blank sheet of paper to create a pocket for the bottom half of the inside centre panel. Use this pocket for students to store the solutions to a variety of equations. Students can use these solutions as a quick review at the beginning of each class or before an exam.