Activity 12 Assessment
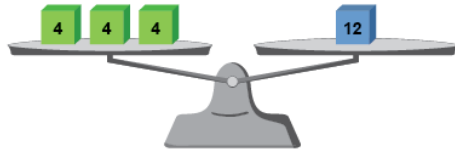## Using Equations to Solve Problems

Solving Unknowns in Equations

Uses concrete materials to "guess and check."	Draws and interprets pictures using a balance model.	Decomposes and recomposes numbers.

Uses concrete materials to "guess and check."

"I know that 3 multiplied by 4 is 12."

Draws and interprets pictures using a balance model.

$$3 \times \blacksquare = 6$$

"I placed 1 in each group until the pans balanced; $\blacksquare = 2$"

Decomposes and recomposes numbers.

$$3 \times 8 = \blacksquare$$

$$3 \times 8 = (2 \times 8) + (1 \times 8)$$
$$(2 \times 8) + (1 \times 8) = 16 + 8$$
$$16 + 8 = 24$$

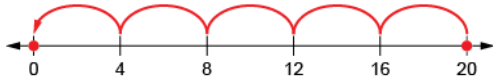"I can decompose the equation into parts that can help me solve for the unknown."

Observations/Documentation

		.

Mathology 4
Copyright © 2022 Pearson Canada Inc.

The right to reproduce or modify this page is restricted to purchasing schools.
This page may have been modified from its original.

Activity 12 Assessment
Using Equations to Solve Problems

Solving Unknowns in Equations (cont'd)

Uses relationships and properties of operations (inverse operations, associative property).	Writes a statement for a given equation and solves for the unknown.	Flexibly uses multiple strategies to solve equations.
$$20 = 4 \times \blacksquare$$ "I rewrote the equation as a division equation: $20 \div 4 = \blacksquare$."	$$\blacksquare \div 6 = 3$$ "I had a bag of baby carrots. I shared them equally with me and 5 friends and we each ended up with 3. How many baby carrots were in the bag to start?"	$$\blacksquare \times 2 = 30 - 4$$ "I know something times 2 is equal to 26, because $30 - 4$ is 26. I can rewrite using division: $26 \div 2 = \blacksquare$. So, the unknown is 13."

Observations/Documentation

Mathology 4
Copyright © 2022 Pearson Canada Inc.

The right to reproduce or modify this page is restricted to purchasing schools.
This page may have been modified from its original.