

Activity 12 Assessment

Using Equations to Solve Problems

Solving Unknowns in Equations

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.”

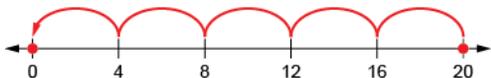
Observations/Documentation

Activity 12 Assessment

Using Equations to Solve Problems

Solving Unknowns in Equations (cont'd)

Uses relationships and properties of operations (inverse operations, associative property).



$$20 = 4 \times \blacksquare$$

"I rewrote the equation as a division equation:
 $20 \div 4 = \blacksquare$."

Writes a statement for a given equation and solves for the unknown.

$$\blacksquare \div 6 = 3$$

"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?"

Flexibly uses multiple strategies to solve equations.

$$\blacksquare \times 2 = 30 - 4$$

"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