Unit 6 Lesson 3: Staying in Balance

1 Hanging Around (Warm up)

Images for Launch
For diagram A, find:

1. One thing that must be true
2. One thing that could be true or false
3. One thing that cannot possibly be true

For diagram B, find:

1. One thing that must be true
2. One thing that could be true or false
3. One thing that cannot possibly be true
2 Match Equations and Hangers

Student Task Statement

1. Match each hanger to an equation. Complete the equation by writing $x$, $y$, $z$, or $w$ in the empty box.

   $\square + 3 = 6$  \hspace{1cm}  $3 \cdot \square = 6$  \hspace{1cm}  $6 = \square + 1$  \hspace{1cm}  $6 = 3 \cdot \square$

2. Find a solution to each equation. Use the hangers to explain what each solution means.
Activity Synthesis

A

B

Illustrative Mathematics
3 Connecting Diagrams to Equations and Solutions

Student Task Statement

Here are some balanced hangers. Each piece is labeled with its weight.

For each diagram:

1. Write an equation.

2. Explain how to reason with the diagram to find the weight of a piece with a letter.

3. Explain how to reason with the equation to find the weight of a piece with a letter.