

Unit 3 Lesson 8: Reasoning about Solving Equations (Part 2)

1 Equivalent to $2(x + 3)$ (Warm up)

Student Task Statement

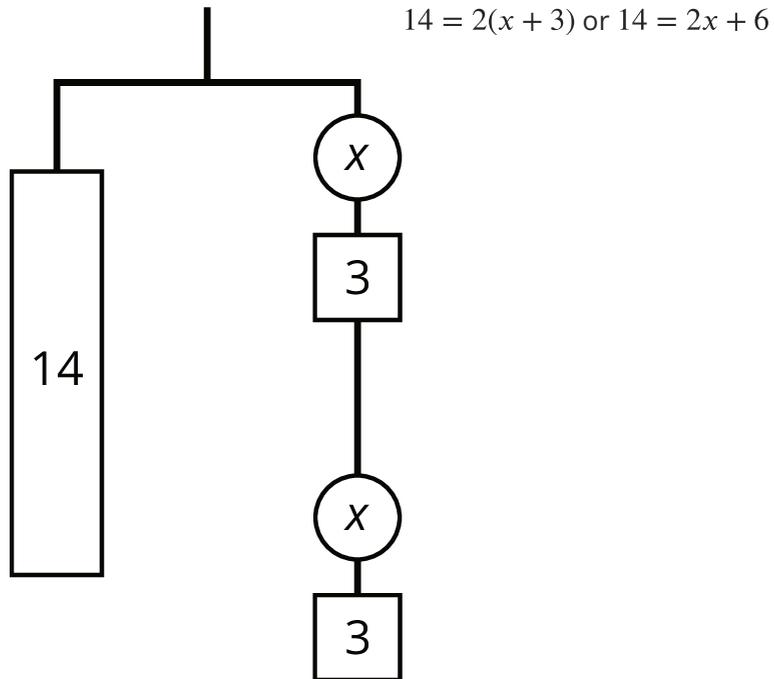
Select all the expressions equivalent to $2(x + 3)$.

1. $2 \cdot (x + 3)$
2. $(x + 3)^2$
3. $2 \cdot x + 2 \cdot 3$
4. $2 \cdot x + 3$
5. $(2 \cdot x) + 3$
6. $(2 + x)^3$

2 Either Or

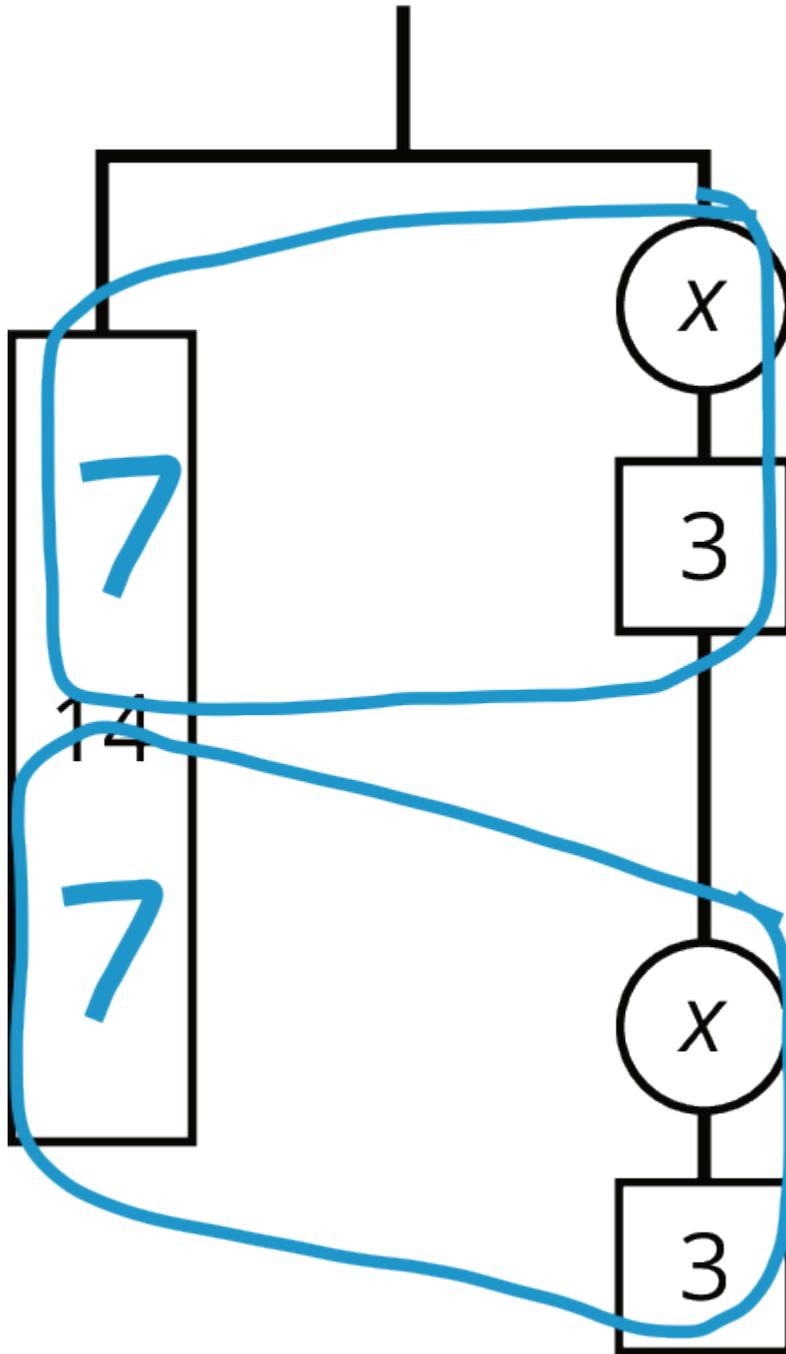
Student Task Statement

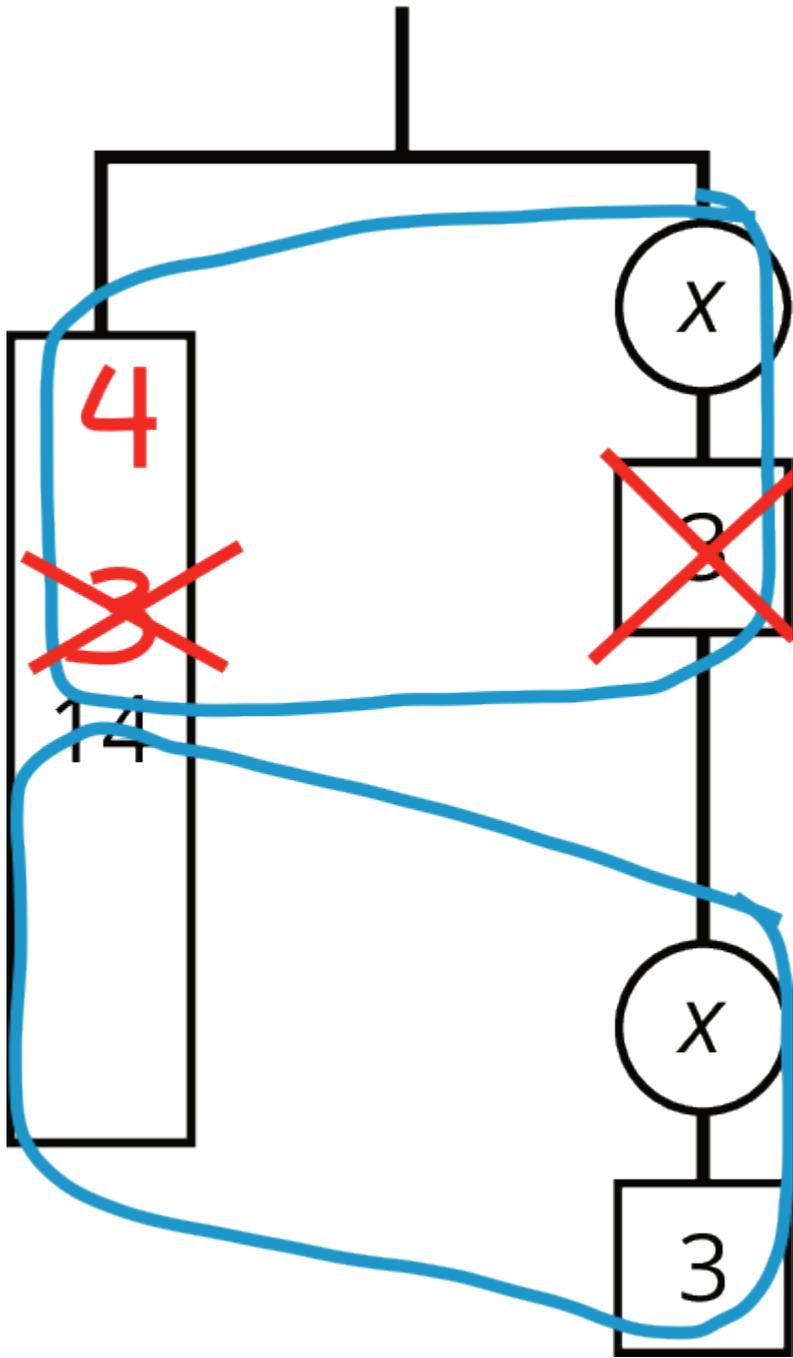
1. Explain why either of these equations could represent this hanger:



2. Find the weight of one circle. Be prepared to explain your reasoning.

Activity Synthesis

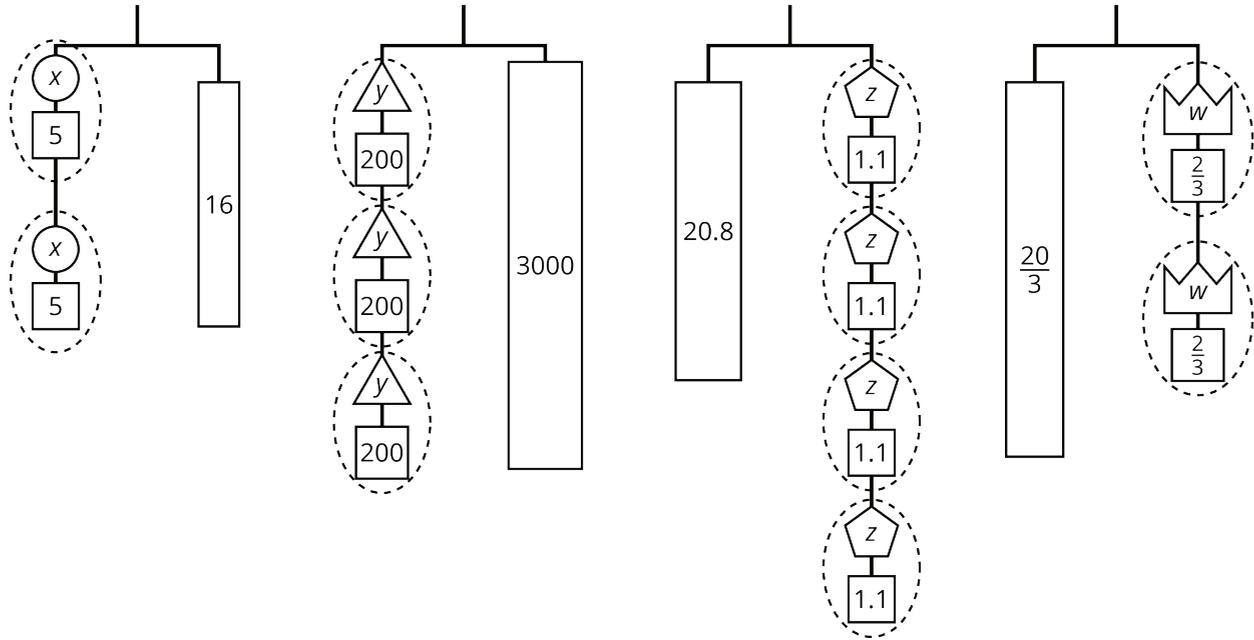




3 Use Hangers to Understand Equation Solving, Again

Student Task Statement

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



For each diagram:

1. Assign one of these equations to each hanger:

$$2(x + 5) = 16$$

$$3(y + 200) = 3,000$$

$$20.8 = 4(z + 1.1)$$

$$\frac{20}{3} = 2\left(w + \frac{2}{3}\right)$$

2. Explain how to figure out the weight of a piece labeled with a letter by reasoning about the diagram.
3. Explain how to figure out the weight of a piece labeled with a letter by reasoning about the equation.