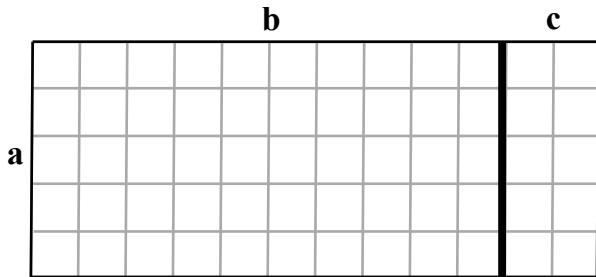


MathFLIX CHALLENGE

Distributive Property Illustrated

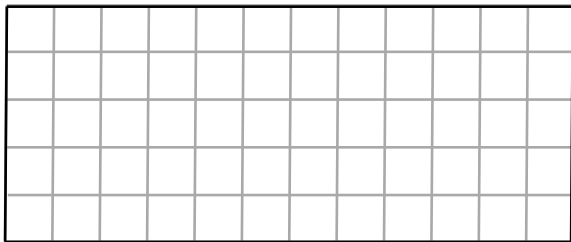
The rectangle below measures 5 units by 12 units. In order to illustrate the distributive property, we drew a line that divides this large rectangle into smaller rectangles that measure 5 units by 10 units and one that measures 5 units by 2 units. If we substitute the correct values for a, b, and c we will have a model that illustrates the distributive property.



$$\begin{aligned} a &= 5 \\ b &= 10 \\ c &= 2 \end{aligned}$$

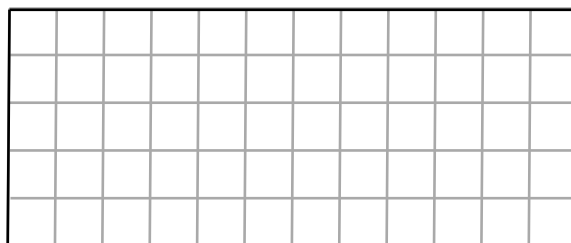
$$\begin{aligned} a(b + c) &= ab + ac \\ 5(10 + 2) &= 5 \cdot 10 + 5 \cdot 2 \\ 60 &= 60 \end{aligned}$$

The rectangle below measures 5 units by 12 units. Can you draw a line that divides this large rectangle into smaller rectangles that measure 5 units by 9 units and one that measures 5 units by 3 units. If you substitute the correct values for a, b and c, you will have a model that illustrates the distributive property. Prove it!



$$a(b + c) = ab + ac$$

The rectangle below measures 5 units by 12 units. Can you draw a line that divides this large rectangle into smaller rectangles that measure 5 units by 8 units and one that measures 5 units by 4 units. If you substitute the correct values for a, b and c, you will have a model that illustrates the distributive property. Prove it!



$$a(b + c) = ab + ac$$

Use these two rectangles to create your own models for the distributive property.

