Write

Explain the Distributive Property in terms of composing and decomposing numbers.

Remember

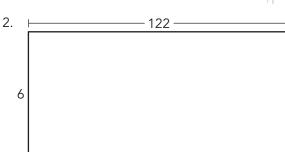
There are many ways to rewrite equivalent expressions using properties. The Distributive Property of Multiplication over Addition states that for any numbers a, b, and c, a(b + c) = ab + ac.

Practice

Decompose each rectangle into two or three smaller rectangles to demonstrate the Distributive Property. Then write each area in the form a(b + c) = ab + ac.



1. + - 122 · 3



3. 244 6

Evaluate each expression using the Distributive Property. Show your work.

$$4.6(12 + 4)$$

5.
$$10 + 4(2 + 20)$$
 6. $7(4 + 19)$

$$6.7(4 + 19)$$

Stretch

Decompose each rectangle into smaller rectangles to demonstrate the Distributive Property. Write each area in the form a(b + c) = ab + ac and then determine the total area.

1.
$$\frac{1}{2}$$

Review

Calculate the area of each rectangle.

1. Width = 5 feet
Length =
$$\frac{2}{3}$$
 foot

3. Width = 15 inches
Length =
$$\frac{2}{3}$$
 inch

2. Width = 10 feet
Length =
$$\frac{2}{3}$$
 foot

4. Width = 20 inches
Length =
$$\frac{2}{3}$$
 inch