

NAME _____

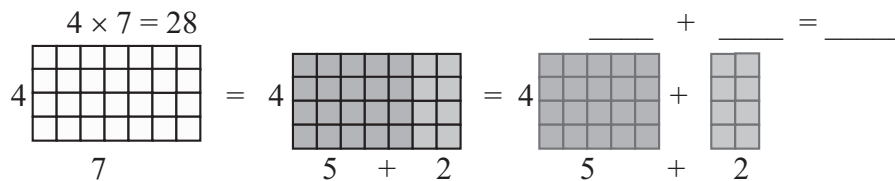
Module 1 Number Sense
Lesson 4 Distributive Properties

Lesson Objectives

- Identify the Distributive Property by using physical models.
- Apply the Distributive Properties to simplify computations with whole numbers.

Subtopic 1 Distributive Property Model 1-Digit Numbers

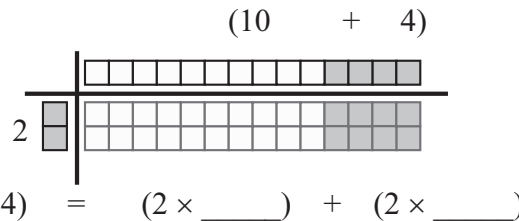
The Distributive Property of Multiplication over Addition states that multiplying a number and a sum is the same as multiplying the number by each part of the _____ and then _____, $4(5 + 2) = (4 \times 5) + (4 \times 2)$.



Solve the following products using the Distributive Property as shown.

1 $6 \cdot 5 = 6(3 + 2)$ 2 $3 \cdot 9 = 3(4 + 5)$

Subtopic 2 Distributive Property Model 1-Digit Number Times 2-Digit

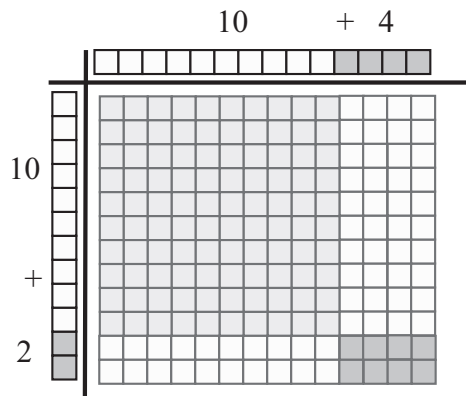


Solve the following products using the Distributive Property as shown.

3 $4(12) = 4(10 + 2)$ 4 $3(13) = 3(10 + 3)$

Subtopic 3

Distributive Property Model 2-Digit Numbers



$$(12)(14) = (10 \times \underline{\quad}) + (10 \times \underline{\quad}) + (2 \times \underline{\quad}) + (2 \times \underline{\quad})$$

Solve the following products using the Distributive Property as shown.

- ★ 5 $(11)(14) = (10 + 1)(10 + 4)$ ★ 6 $(12)(15) = (10 + 2)(10 + 5)$

Subtopic 4

Distributive Property of Multiplication Over Subtraction

The Distributive Property of Multiplication over _____ states that multiplying a number and a difference is the same as multiplying the number by each part of the difference and then subtracting, $4(5 - 2) = \underline{\hspace{2cm}}$.

Use the Distributive Property of Multiplication over Subtraction to find the product.

- ★ 7 $5(17)$
★ 8 $12(25)$

Subtopic 5

Applications of the Distributive Property

Use the Distributive Property to solve the following.

- ★ 9 Crater Rim Auditorium has fifty-two rows with thirty-three seats in each. How many seats are there altogether?