

Finding Area Using the Distributive Property

(3.MD.C.7.C)

Area is the space within a closed shape. An **area model** uses a rectangle divided into rows and columns to demonstrate multiplication. The **distributive property** tells us that a multiplication fact can be broken into the sum of two other multiplication facts. **Tiling** a rectangle means covering the shape with smaller pieces so that there are no gaps or overlaps.

If your students...

Misconception #1: Think that creating an area model is the same as tiling, or tiles incorrectly.

WATCH: Tiling a shape

<https://www.youtube.com/watch?v=mMT8LM9B4Mw>

Misconception #2: Add the number outside the parenthesis to the numbers inside the parenthesis instead of multiplying when practicing the distributive property.

WATCH: The distributive property

<https://www.opened.com/video/distributive-property/337834>

For extra practice with area and the distributive property:

ACTIVITY: Finding area of squares and rectangles

<https://www.ixl.com/math/grade-3/area-of-squares-and-rectangles-word-problems>

ACTIVITY: Multiply using the distributive property

<https://www.ixl.com/math/grade-3/multiply-using-the-distributive-property>

ACTIVITY: Create figures with a given area

<https://www.ixl.com/math/grade-3/create-figures-with-a-given-area>

