LESSON MAKER PRO

Tile It Up

Find rectangle areas with rows of squares.

GRADE 3 · 3.GR.C.7.a

3.GR.C.7.a "Determine the area of a rectangle with whole-number side lengths by tiling and connecting the visual representation to multiplication of the side lengths to solve problems in context."

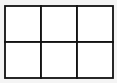
NAME _____ DATE _____

ROWS MAKE AREA

Equal-size squares can cover a rectangle with no gaps or overlaps. Multiply the number of rows by the number of squares in each row to find its area.

WORKED EXAMPLE

Each square is 1 square inch. What is the rectangle's area?



1. Count 2 rows.
2. Count 3 squares in each row.
3. 2 x 3 = 6.

Answer: 6 square inches

PRACTICE 4 problems

1 A rectangle has 4 rows of 5 unit squares. Write a multiplication sentence for its area.

ANSWER _____

2 A rectangle has 4 rows of 7 unit squares. Write a multiplication sentence for its area.

ANSWER _____

3 A rectangle has 5 rows of 8 unit squares. Write a multiplication sentence for its area.

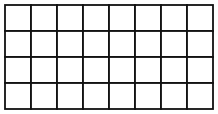
ANSWER _____

4 A rectangle has 7 rows of 9 unit squares. Write a multiplication sentence for its area.

ANSWER _____

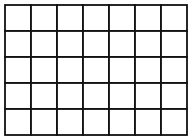
APPLY IT Show your work

1 A sticker sheet is tiled as shown. How many square stickers cover it? Write a multiplication sentence.



ANSWER _____

2 Each square on this game mat covers 1 square foot. What is the mat's area? Write a multiplication sentence.



ANSWER _____

CHALLENGE One step up

A rectangle has 8 rows of 9 unit squares. Sam says its area is 8 + 9. Explain the error and find the area.

WORK SPACE AND ANSWER

ANSWER KEY

Tile It Up

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A rectangle has 4 rows of 5 unit squares. Write a multiplication sentence for its area.	**4 x 5 = 20 square units**
2	A rectangle has 4 rows of 7 unit squares. Write a multiplication sentence for its area.	**4 x 7 = 28 square units**
3	A rectangle has 5 rows of 8 unit squares. Write a multiplication sentence for its area.	**5 x 8 = 40 square units**
4	A rectangle has 7 rows of 9 unit squares. Write a multiplication sentence for its area.	**7 x 9 = 63 square units**

PART 2 · APPLY IT

1. **4 x 8 = 32 square stickers** There are 4 rows of 8 stickers, so 4 x 8 = 32.
2. **5 x 7 = 35 square feet** There are 5 rows of 7 squares, so the area is 5 x 7 = 35 square feet.

CHALLENGE

Adding does not count all the squares in 8 rows of 9. The area is 8 x 9 = 72 square units.

Accept multiplication in either order. For the challenge, accept any explanation that connects multiplication to counting all 8 rows.