

Rectangle Area Puzzle

Split shapes, then add the areas.

GRADE 3 • NY-3.MD.7.d

NY-3.MD.7.d "Recognize area as additive. Find areas of figures composed of non-overlapping rectangles, and apply this technique to solve real world problems."

NAME _____

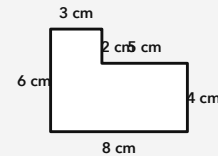
DATE _____

ADD RECTANGLE AREAS

Split a composite shape into rectangles that do not overlap.
Find each rectangle's area by multiplying, then add the areas.

WORKED EXAMPLE

Find the area of the figure.



1. Split it into a bottom rectangle and a top rectangle.
2. Bottom area: $8 \times 4 = 32$ square cm.
3. Top area: $3 \times 2 = 6$ square cm.
4. Add: $32 + 6 = 38$ square cm.

Answer: 38 square cm

PRACTICE 4 problems

- 1** A shape has two non-overlapping rectangles. One is 7 cm by 9 cm. The other is 10 cm by 7 cm. Find the total area.

ANSWER _____

- 2** Two non-overlapping rectangles make a shape. Their sizes are 11 cm by 7 cm and 9 cm by 10 cm. Find the area.

ANSWER _____

- 3** Find the area of a shape made from a 12 cm by 7 cm rectangle and a 9 cm by 9 cm rectangle. The rectangles do not overlap.

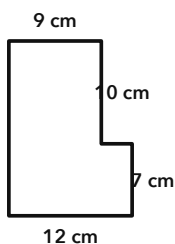
ANSWER _____

- 4** A composite shape has a 10 cm by 10 cm rectangle and an 11 cm by 9 cm rectangle. They do not overlap. Find the area.

ANSWER _____

APPLY IT Show your work

- 1** A garden is shaped like the figure. What is the garden's area?



ANSWER _____

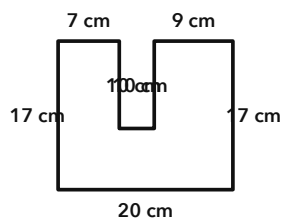
- 2** A reading nook has two non-overlapping rugs. One rug is 11 cm by 12 cm. The other is 7 cm by 10 cm. What area do the rugs cover altogether?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The patio has a notch. Find its area. Show how you split it into rectangles.



WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A shape has two non-overlapping rectangles. One is 7 cm by 9 cm. The other is 10 cm by 7 cm. Find the total area.	133 square cm
2	Two non-overlapping rectangles make a shape. Their sizes are 11 cm by 7 cm and 9 cm by 10 cm. Find the area.	167 square cm
3	Find the area of a shape made from a 12 cm by 7 cm rectangle and a 9 cm by 9 cm rectangle. The rectangles do not overlap.	165 square cm
4	A composite shape has a 10 cm by 10 cm rectangle and an 11 cm by 9 cm rectangle. They do not overlap. Find the area.	199 square cm

PART 2 • APPLY IT

1. **174 square cm** Split the garden into a 12 cm by 7 cm rectangle and a 9 cm by 10 cm rectangle. Add 84 and 90.
2. **202 square cm** Find each rug's area: $11 \times 12 = 132$ and $7 \times 10 = 70$. Add $132 + 70$.

CHALLENGE

300 square cm; $20 \times 7 + 7 \times 10 + 9 \times 10 = 300$

Accept any correct split into non-overlapping rectangles. Accept square centimeters written as square cm or cm^2 .