LESSON MAKER PRO

Triangle Area Quest

Practice, apply, and explain right triangle area.

GRADE 5 · 5.MG.2.b

5.MG.2.b "Estimate and determine the area of a right triangle, with diagrams, when the base and the height are given in whole number units, in metric or U.S. Customary units, and record the solution with the appropriate unit of measure (e.g...."

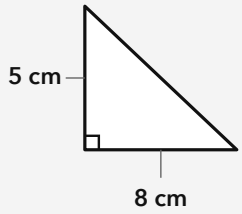
NAME _____ DATE _____

FIND HALF THE RECTANGLE

The area of a right triangle is 1/2 × base × height. Use the two sides that meet at the right angle, then write the answer in square units.

WORKED EXAMPLE

Find the area of the right triangle.

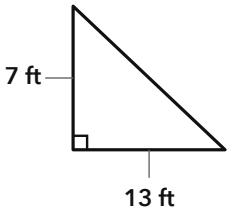


1. Base × height = 8 × 5 = 40.
2. Take half: 40 / 2 = 20.
3. Use square centimeters.

Answer: 20 cm^2

PRACTICE 4 problems

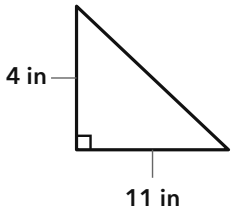
1 Round each measure to the nearest ten feet. Estimate the area, then find the exact area.



ANSWER _____

_____

2 Find the area of the right triangle.



ANSWER _____

3 A right triangle has a base of 14 m and a height of 9 m. Find its area.

ANSWER _____

4 A right triangle has a base of 16 yd and a height of 3 yd. Find its area.

ANSWER _____

APPLY IT Show your work

1 The school soccer team makes a right-triangle pennant. Its base is 18 inches and its height is 10 inches. What is its area?

WORK SPACE

ANSWER _____

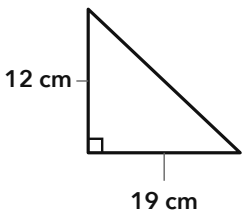
2 At a skate park, a triangular mural has a base of 13 feet and a perpendicular height of 6 feet. What area will it cover?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Estimate the area by rounding the base to the nearest ten centimeters. Then find the exact area. Explain why the estimate is greater.



WORK SPACE AND ANSWER

ANSWER KEY

Triangle Area Quest

GRADE 5 · 5.MG.2.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Round each measure to the nearest ten feet. Estimate the area, then find the exact area.	**Estimate: 50 ft^2; exact: 45.5 ft^2.**
2	Find the area of the right triangle.	**22 in^2**
3	A right triangle has a base of 14 m and a height of 9 m. Find its area.	**63 m^2**
4	A right triangle has a base of 16 yd and a height of 3 yd. Find its area.	**24 yd^2**

PART 2 · APPLY IT

1. **90 in^2** Compute 1/2 × 18 × 10 = 90.
2. **39 ft^2** Compute 1/2 × 13 × 6 = 39.

CHALLENGE

Estimate: 120 cm^2. Exact: 114 cm^2. The estimate is greater because 19 was rounded up to 20.

Accept square-unit words or unit notation such as cm^2. For Problem 1, accept 50 ft^2 as the estimate and 45.5 ft^2 as the exact area.