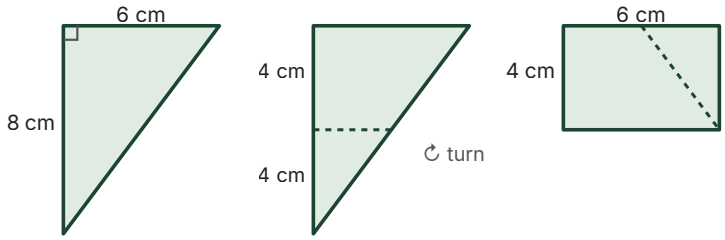
Area of Triangles

Geometry & Shapes • Answer Key

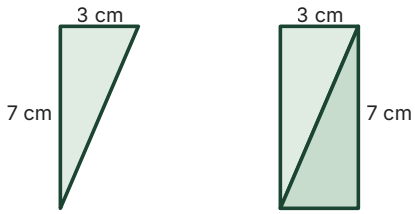
ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 1, Lesson 5

1. **To find the area of this right triangle, Diego cut it in half along a dashed line and turned the bottom piece to form a rectangle. Explain how Diego could use his rectangle to find the area of the triangle.**



The rectangle has a base of 6 cm and a height of 4 cm (half the triangle's height), so its area is 6 × 4 = 24 sq. cm. The triangle has the same area because no pieces were added or removed: 24 sq. cm.

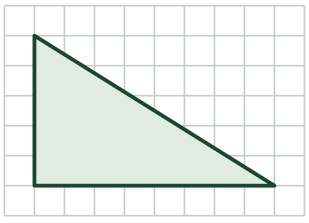
2. **To find the area of this triangle, Nadia used two identical copies of the triangle to create a rectangle. Explain how Nadia could use her rectangle to find the area of the triangle.**



The rectangle is 3 cm × 7 cm = 21 sq. cm. It is made of two identical triangles, so one triangle has half the area: 21 ÷ 2 = 10.5 sq. cm.

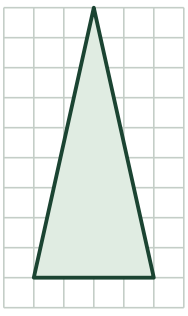
3. **Determine the area of each triangle. Each small square in the grid has an area of 1 square unit.**

a



Area: **20 sq. units**

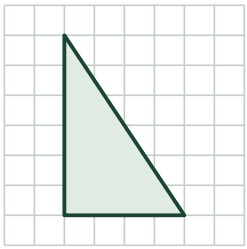
b



Area: **18 sq. units**

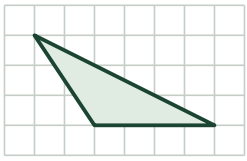
Problems 4–6: Determine the area of each triangle. Show or explain your thinking. Each small square in the grid has an area of 1 square unit.

4.



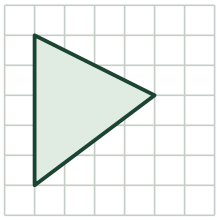
Half of 4 × 6: 12 sq. units

5.



Base 4, height 3. Half of 4 × 3: 6 sq. units

6.



Base 5, height 4. Half of 5 × 4: 10 sq. units

7. Ava says the area of this triangle is 72 square units. Is Ava correct? Explain your thinking.

No. The base is 9 units and the height is 8 units. 9 × 8 = 72 is the area of a parallelogram made from two copies of the triangle. The triangle's area is half of that: 36 square units.

