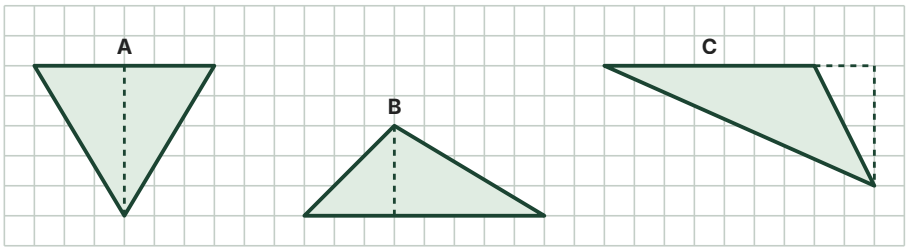
Triangle Area Formula

Geometry & Shapes • Answer Key

ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 1, Lesson 7

1. For each triangle, a base and its corresponding height are shown. Each small square in the grid has an area of 1 square unit. Complete the table.

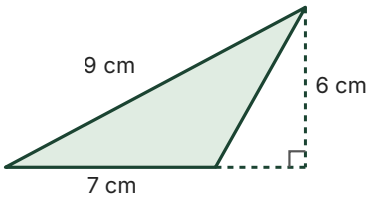


Triangle C: base is the top side (7 units); the height is the dashed distance (4 units) from the opposite vertex to the line containing the base.

	Base (units)	Height (units)	Area (square units)
Triangle A	**6**	**5**	**15**
Triangle B	**8**	**3**	**12**
Triangle C	**7**	**4**	**14**
Any Triangle	*b*	*h*	$\frac{1}{2} \cdot b \cdot h$

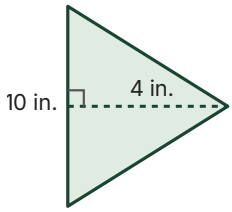
2. Determine the area of each triangle.

a



Area: **21 sq. cm**

b



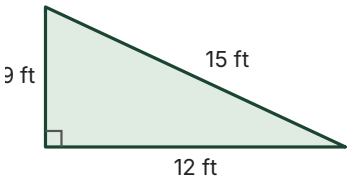
Area: **20 sq. in.**

3. Use the given bases and heights to determine the area of each triangle.

	Base (units)	Height (units)	Area (square units)
Triangle A	10	7	**35**
Triangle B	12	9	**54**
Triangle C	5	5	**12.5**
Triangle D	8.5	6	**25.5**

4. Determine the area of the triangle. Show your thinking.

$\frac{1}{2} \cdot 12 \cdot 9 = 54$ sq. ft (the 15 ft side is not needed)



5. A triangle has a base of 18.4 centimeters and a height of 10 centimeters. Determine its area.

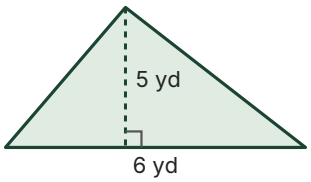
92 sq. cm

6. A triangle has a base of 9 inches and a height of 11 inches. Determine its area.

49.5 sq. in.

7. A pumpkin patch at a farm is shaped like a triangle with the dimensions shown. Determine the area of the pumpkin patch.

15 sq. yd



8. A triangle has a base of 12 meters and an area of 84 square meters. What is the height of this triangle? Explain your thinking.

14 meters. Area = $\frac{1}{2} \cdot b \cdot h$, so $84 = 6 \cdot h$. $84 \div 6 = 14$.

