Answers and talk notes

Determine the Area of Triangles

What your student is learning

Tonight we find the area of a triangle. A triangle is a shape with three sides. We use the rule: area = ½ × base × height.

Answers

Ask your student to explain before you look.

1. **A.** One half. One half of the rectangle: the triangle fills half of it.
2. **B.** 30 cm^2. A = ½ × 10 × 6 = 30 cm^2.
3. **D.** A = ½ × b × h. The area of a triangle is A = ½ × b × h.
4. **C.** 18 in^2. A = ½ × 9 × 4 = 18 in^2.
5. **B.** 42 m^2. A = ½ × 12 × 7 = 42 m^2.
6. **A.** 20 ft^2. A = ½ × 5 × 8 = 20 ft^2.

Talk about it

Does the triangle fill the whole 12 by 8 rectangle, or only part of it?

Home mission

Cut a sheet of paper in half, corner to corner. Lay the two triangles on top of each other. What do you notice? How is each triangle related to the whole sheet?

When they are stuck, ask

- Which number is the height — the straight-up one or the slanted side?
- Let's multiply the base and height first, then take half.
- Did we remember to take half at the end?

Try not to say

- You don't need the half — just multiply base times height.
- Take half of the base and half of the height both.
- Use the slanted side as the height.