Determine the Area of Triangles

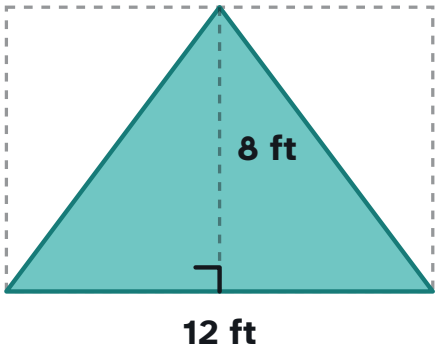
Find the area of a triangle by taking half of base times height.

Name _____ **Date** _____

Tonight's spark

A garden plan is a triangle with a base of 12 feet and a height of 8 feet. How many square feet does it cover?

Make a guess first: is the triangle bigger or smaller than a 12 by 8 foot rectangle?



Our class model: half of a rectangle

Try it

Work it out on paper. Write one answer on each line.

1 **A triangle is what part of a rectangle that has the same base and height?**

A. One half **B.** The same as the rectangle **C.** Twice the rectangle **D.** One quarter

My answer _____

2 **A triangle has a base of 10 cm and a height of 6 cm. What is its area?**

A. 60 cm^2 **B.** 30 cm^2 **C.** 16 cm^2

My answer _____

3 **Which formula gives the area of a triangle?**

A. $A = b + h$ **B.** $A = b \times h$ **C.** $A = 2 \times b \times h$ **D.** $A = \frac{1}{2} \times b \times h$

My answer _____

4 **A triangle has a base of 9 in., a height of 4 in. and another side of 6 in. What is its area?**

A. 36 in^2 **B.** 27 in^2 **C.** 18 in^2 **D.** 19 in^2

My answer _____

5 **A triangle has a base of 12 m and a height of 7 m. What is its area?**

A. 84 m^2 **B.** 42 m^2 **C.** 19 m^2

My answer _____

6 **A triangular sail has a base of 5 ft and a height of 8 ft. How much cloth does it need?**

A. 20 ft^2 **B.** 40 ft^2 **C.** 13 ft^2 **D.** 26 ft^2

My answer _____

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?

If we get 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?

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/5-2/homework.html

How did it feel? (optional)

Tricky Getting there Got it