Determine the Area of Parallelograms and Rhombuses

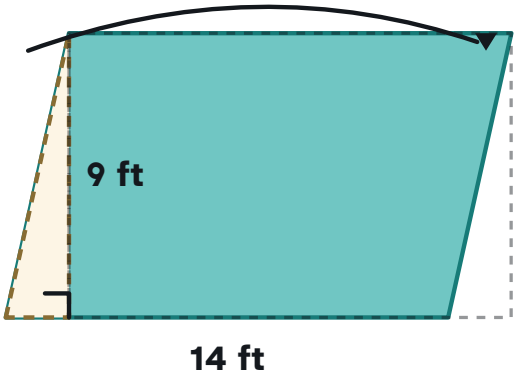
Find the area of a parallelogram by multiplying its base by its straight-up height.

Name _____ **Date** _____

Tonight's spark

Mr. Reyes is tiling a backyard patio shaped like a leaning rectangle. It is 14 feet along the bottom and 9 feet straight up. Each tile covers 1 square foot. How many tiles does he need?

Guess first: more than 100 tiles, or fewer?



Our class model: cut and slide

Try it

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

1 **What is the height of a parallelogram?**

A. The length of the slanted side

B. The straight-up distance from the base to the opposite side

C. The distance around the shape **D.** The sum of the base and the slanted side

My answer _____

2 **A parallelogram has a base of 6 cm and a height of 4 cm. What is its area?**

A. 24 cm^2 **B.** 10 cm^2 **C.** 20 cm^2 **D.** 12 cm^2

My answer _____

3 **A parallelogram has a base of 9 in., a height of 5 in. and a slanted side of 6 in. What is its area?**

A. 54 in² **B.** 30 in² **C.** 45 in² **D.** 20 in²

My answer _____

4 **A parallelogram has a base of 8 m and a height of 3 m. Which expression gives its area?**

A. 8 + 3 **B.** ½ × 8 × 3 **C.** 2 × (8 + 3) **D.** 8 × 3

My answer _____

5 **Parallelogram A has a base of 7 and a height of 6. Parallelogram B has a base of 5 and a height of 9. Which has the greater area?**

A. A, 42 square units **B.** B, 45 square units **C.** They are equal

D. A, because its base is longer

My answer _____

Talk about it

Which measurement is the height: the slanted side or the straight-up distance? How do you know?

Home mission

A different situation: stack 10 or more cards or sticky notes into a neat block. Look at it from the side. Now push the top sideways so the stack leans. Did the base or the height change? Did the amount of paper change?

If we get stuck, ask

- Which number is the height — the straight-up one or the slanted side?
- Let's write the rule first: area = base × height.
- What is the base times the height?

Do it on a screen

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

eduwonderlab.com/lessons/5-1/homework.html

How did it feel? (optional)

Tricky Getting there Got it