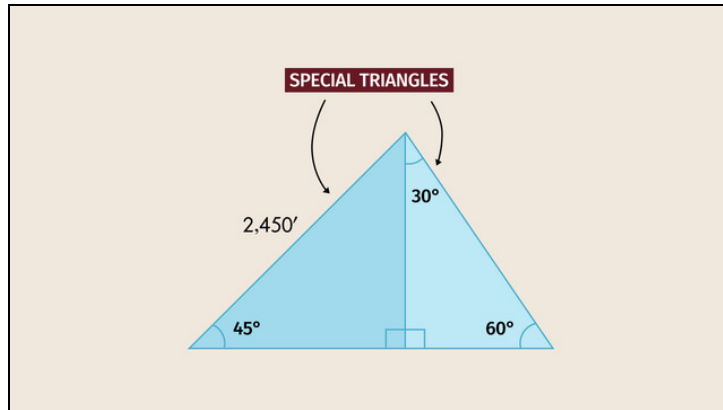




Printable Worksheets from [sofatutor.com](https://www.sofatutor.com)

# Special Triangles



- 1 State what a triangle with two  $45^\circ$  angles is called and what is special about it.
- 2 Solve for the height and distance travelled on land of the plane.
- 3 Calculate the distance Grandpa Lindbergh's plane will fall.
- 4 Determine the length of the missing side.
- 5 Find the distance Grandpa Lindbergh has to fly to get to a height of 1500 feet.
- 6 Calculate the length of the wooden slats needed to build the kite.
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.

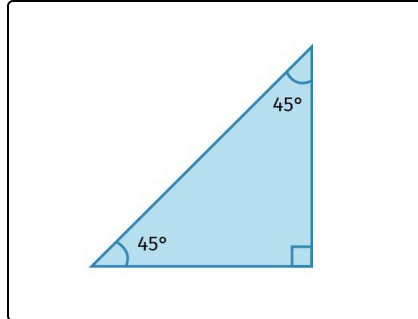


The complete package, including all problems, hints, answers, and detailed answer explanations is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



## State what a triangle with two $45^\circ$ angles is called and what is special about it.

Choose the correct statements.



equilateral right triangle **A**

equilateral triangle **B**

three sides of equal length **C**

isosceles right triangle **D**

two sides of equal length **E**



## Hints for solving these problems

1  
of 6

**State what a triangle with two  $45^\circ$  angles is called and what is special about it.**

**Hint #1**

All angles of an equilateral triangle are equal.

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**Hint #2**

The sum of all the angles of any triangle is always  $180^\circ$ .

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**Hint #3**

The opposite legs of equal angles have equal lengths.

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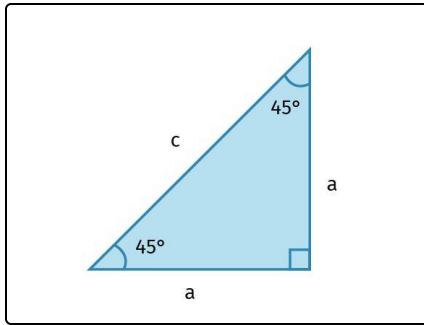


## Answers and detailed answer explanations for these problems

1  
of 6

**State what a triangle with two  $45^\circ$  angles is called and what is special about it.**

**Answer key:** D, E



Any triangle with two  $45^\circ$  angles is an isosceles right triangle.

We can see this in the following way:

- The sum of the three angles of any triangle is always  $180^\circ$ .
- Thus, if two angles are  $45^\circ$ , the last angle must be  $180^\circ - (45^\circ + 45^\circ) = 90^\circ$
- Also, the triangle legs opposite to the  $45^\circ$  angles have equal lengths.