

Geometry

Unit 7 Lesson 2: 45-45-90 Δ's

Name:

Date:

Per: 1 2 3 4 5 6

Q: Given a right triangle, what is most commonly used to find a missing side?

A:

Q: How can we find the length of a missing side, if we only know one side length?

A:

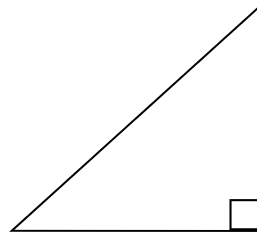
Q: What kind of triangle is a 45-45-90 triangle?

A:

Q: What does that tell you about the legs?

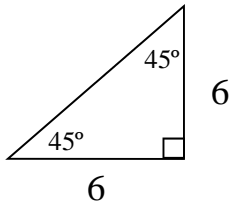
A:

Theorem:

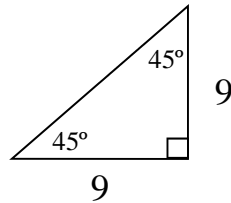


45-45-90 Δ's:

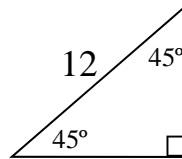
Ex 1) Find the hypotenuse



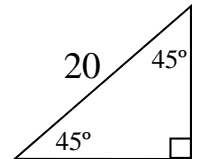
Ex 2) Find the hypotenuse



Ex 3) Find a leg



Ex 4) Find a leg



Q: Can you still use the Pythagorean theorem on the problems above?

A:

Ex 4) Find a leg using Pythagorean theorem

Q: Which would you rather use the Pythagorean theorem or proportions?

A:

Word Problems:

Ex 5) What is the length of the diagonal of a square with a perimeter of 48?

Ex 6) The diagonal of a square is 24. Find the length of its sides.