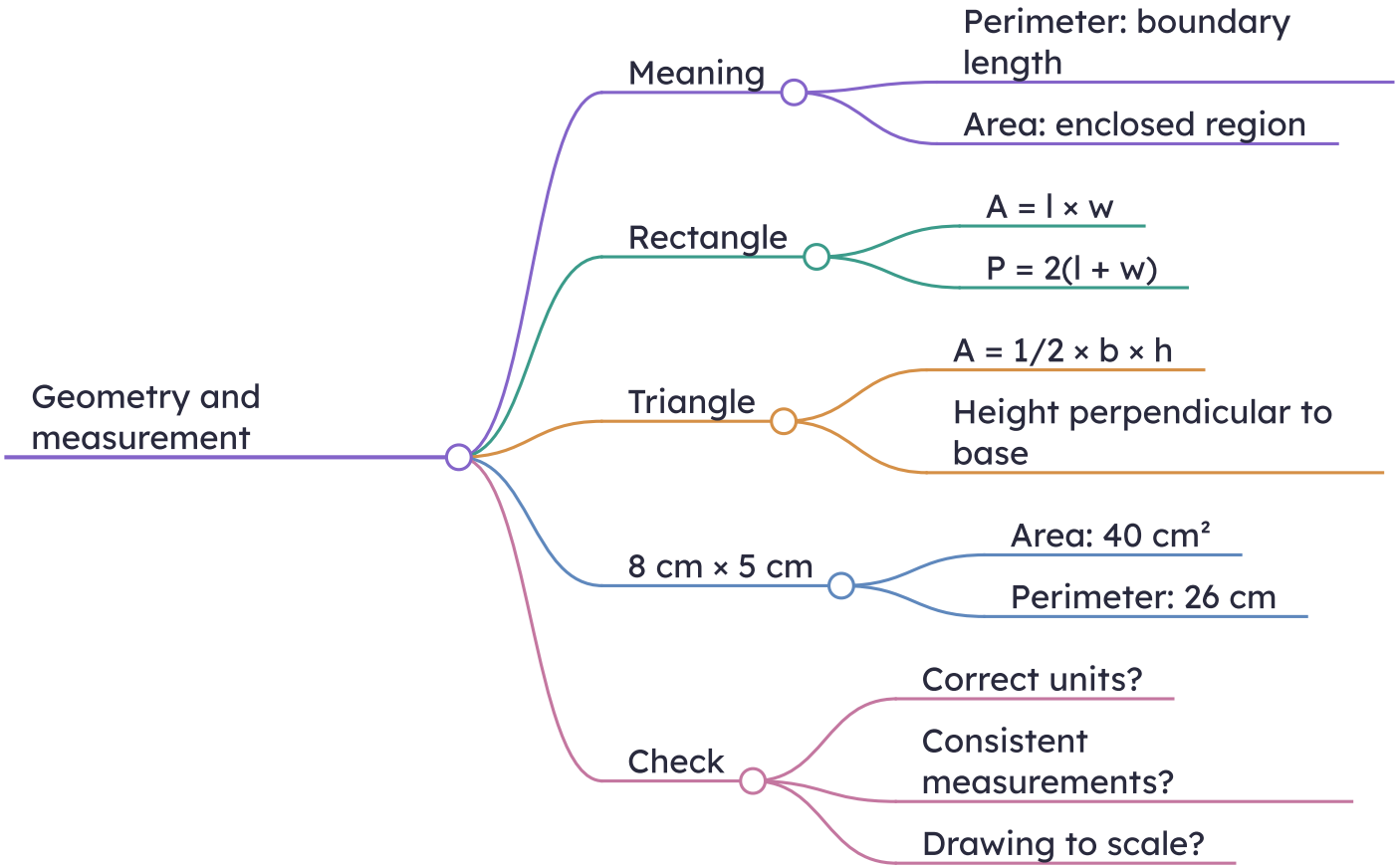
Geometry and measurement

Choose the right quantity, formula, and units for a shape.



Read one branch at a time. Then cover the details and explain them in your own words.

Understand the topic

Perimeter measures a boundary's length; area measures the enclosed region. A rectangle's area is length × width. A triangle's area is half its base × perpendicular height. Area uses square units. A drawing that is not to scale should be interpreted using its stated measurements.

How the map is organized

Start with meaning, then formulas, a worked example, and checks.

> **Watch out for this**
> A triangle's sloping side is not necessarily its perpendicular height.

Try it yourself

Find the area and perimeter of an 8 cm by 5 cm rectangle. Draw another rectangle with the same area but a different perimeter.

Two questions to answer

What is the rectangle's area?

Multiply 8 cm by 5 cm to get 40 cm².

Does equal area guarantee equal perimeter?

Area and perimeter measure different properties.

Sources

openstax.org
https://openstax.org/books/prealgebra-2e/pages/c-geometric-formulas

Original practice material compiled by Studera.ai. Explore at studera.ai/en/resources/mind-map-examples.