Draw Wheel Rims: Spoke Patterns and Tire Profile Comparison

Ordinary topic reference / separately checked pixels



Draw Wheel Rims: Spoke Patterns and Tire Profile Comparison

Original worked example / unchanged complete key

Prompt: A student draws a rim plate with an outer tire radius of 50 mm, a rim edge radius of 38 mm, and 10 spokes. What is the sidewall band width, and what angular step should the spokes use? Show the arithmetic.

Answer: Sidewall band width is 50 minus 38 equals 12 mm. Angular step is 360 divided by 10 equals 36 degrees. Check: 10 times 36 equals 360, so the spokes close the circle evenly. Label 50 mm, 38 mm, and 12 mm as hypothetical examples.