

CHAPTER 1 TASK

Not Your Typical Bookcase

The supports for the shelves of a decorative bookcase are constructed of two triangular pieces of teak.

- The vertical side of the smaller triangle is 13.5 cm long.
- The horizontal side of the larger triangle is 21.0 cm long.
- The side shared by the two triangles is 5.5 cm long.
- The line formed where the two sides join bisects the right angle formed between the wall brace and the shelf.



1. a) Determine the other side lengths and the acute angle measures in each triangle. Round lengths to the nearest millimetre. Round angle measures to the nearest degree.
b) Use your knowledge of triangle geometry to determine the measure of the obtuse angles.
2. Use dynamic geometry software or some other appropriate drawing software to create an electronic template of the shelf support.
3. Use building materials to create a template of the shelf support.