

AO1

**Context**

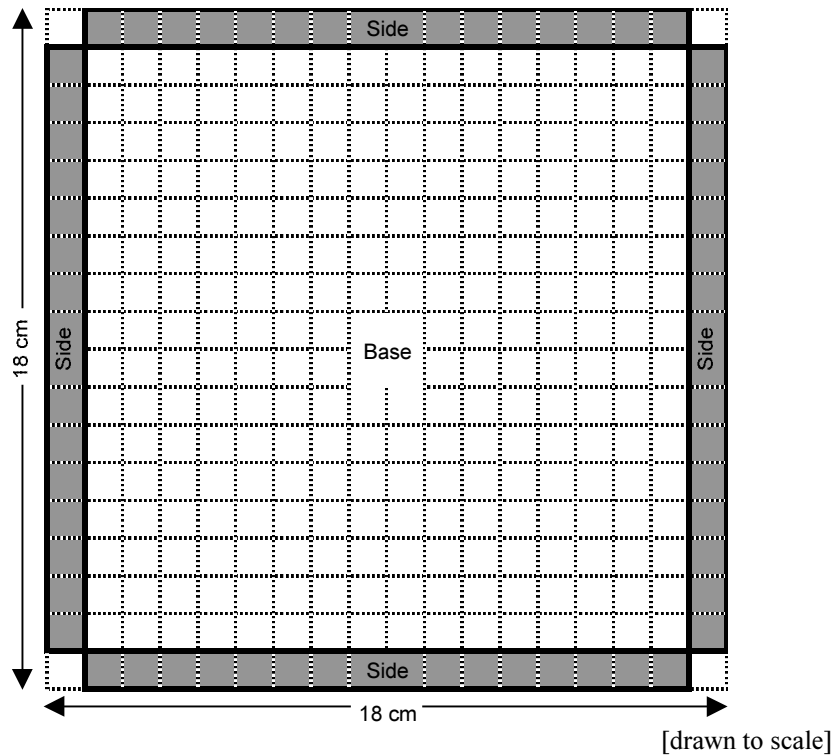
This task is accessible to all candidates regardless of tier of entry. Candidates may tackle problems practically by making shapes or use numerical or algebraic methods. It provides an opportunity for candidates to use mensuration skills.

7

# Trays

A shopkeeper asks a company to make some trays.

A net of a tray made from a piece of card measuring 18cm by 18cm is shown below:



The shopkeeper says, "When the area of the base is the same as the area of the four sides, the volume of the tray will be a maximum".

Investigate this claim.

Investigate further.