

Constructions

Name:

Date:

INQUIRY

Ancient Chinese and Greek mathematicians could construct perfect shapes using only a compass and ruler. Can you?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Construction	Drawing shapes accurately with compass and ruler only.
Bisect	Cut exactly in half.
Perpendicular	At 90 degrees.

Part A — Basic Constructions

1. Using a ruler and protractor, construct a triangle with sides 6 cm, 8 cm and included angle 50 degrees. Measure the third side. [4 marks]

Part B — Compass Constructions

2. Construct the perpendicular bisector of a line segment $AB = 8$ cm. Describe each step. [3 marks]

3. Construct the angle bisector of a 70-degree angle. Describe each step. [3 marks]