

# Congruent Triangles

## Question Paper

Level	GCSE
Subject	Maths
Exam Board	Edexcel GCSE
Topic	Congruent Triangles
Grade Level	Grade 5
Booklet	Question Paper

**Time Allowed:** 17 minutes

**Score:** /14

**Percentage:** /100

**Grade Boundaries:**

1.

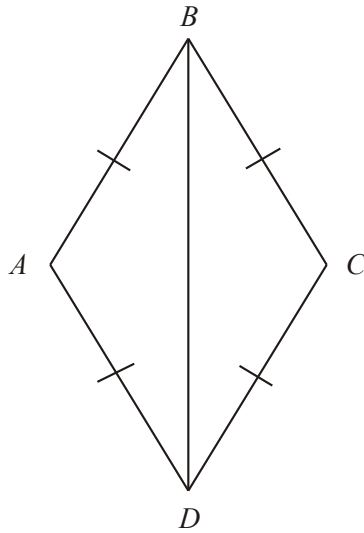


Diagram **NOT** accurately drawn

In the diagram,  $AB = BC = CD = DA$ .

Prove that triangle  $ADB$  is congruent to triangle  $CDB$ .

**(Total 3 marks)**

2.

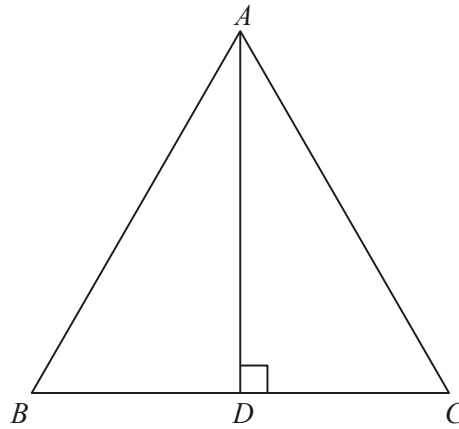


Diagram **NOT** accurately drawn

$ABC$  is an equilateral triangle.

$D$  lies on  $BC$ .

$AD$  is perpendicular to  $BC$ .

(a) Prove that triangle  $ADC$  is congruent to triangle  $ADB$ .

(3)

(b) Hence, prove that  $BD = \frac{1}{2}AB$ .

(2)

(Total 5 marks)

3.

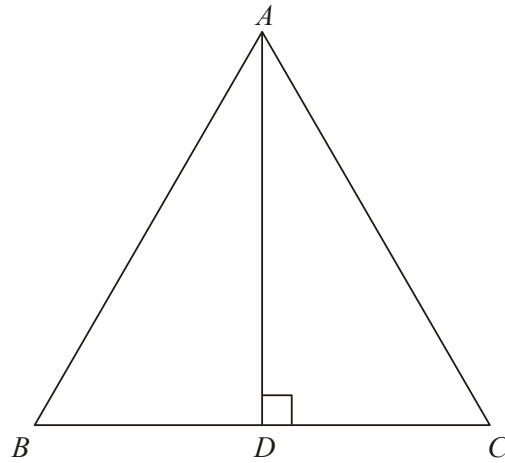


Diagram **NOT** accurately drawn

$ABC$  is an equilateral triangle.

$D$  lies on  $BC$ .

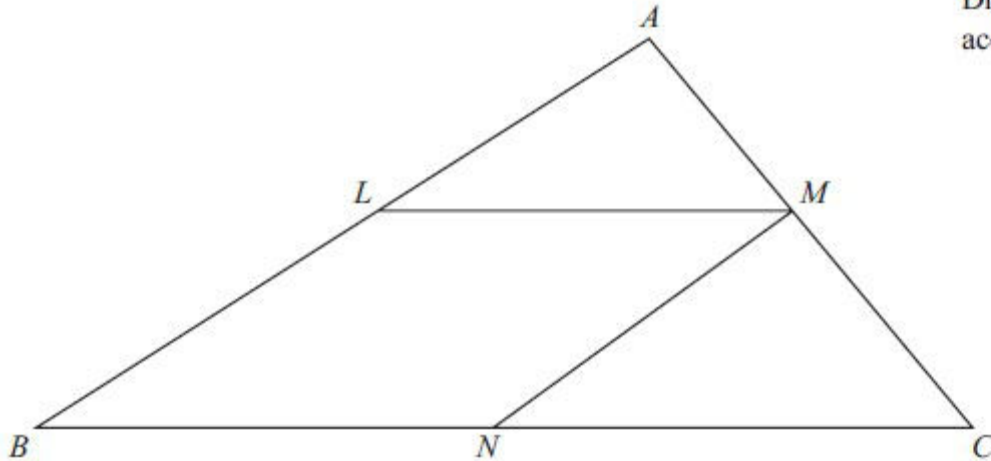
$AD$  is perpendicular to  $BC$ .

Prove that triangle  $ADC$  is congruent to triangle  $ADB$ .

**(Total 3 marks)**

4.

Diagram NOT  
accurately drawn



The diagram shows a triangle  $ABC$ .

$LMNB$  is a parallelogram where  
 $L$  is the midpoint of  $AB$ ,  
 $M$  is the midpoint of  $AC$ ,  
and  $N$  is the midpoint of  $BC$ .

Prove that triangle  $ALM$  and triangle  $MNC$  are congruent.  
You must give reasons for each stage of your proof.

**(Total 3 marks)**