



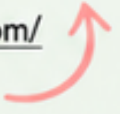
JP Maths

Revision



Attempt the paper
before watching the
solutions!

[https://www.youtube.com/
@JPMathsRevision](https://www.youtube.com/@JPMathsRevision)



FOUNDATION / HIGHER TIER

Congruent Triangles



INSTRUCTIONS

- Use **black ink** or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.



INFORMATION

- The marks for **each** question are shown in brackets– *use this as a guide as to how much time to spend on each question.*



ADVICE

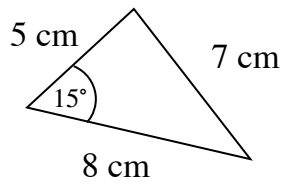
- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.



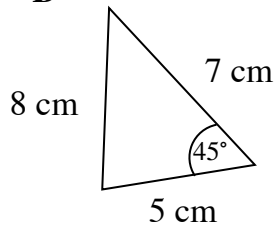
You've got this!

1. Which two triangles are congruent?

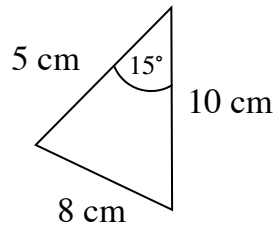
A



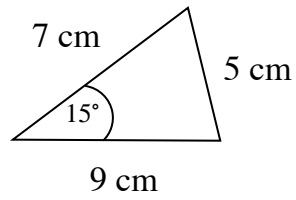
B



C



D



.....
(1)

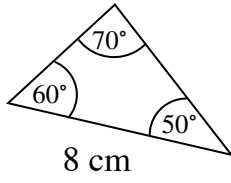
Give reason for your answer.

.....
.....
(1)

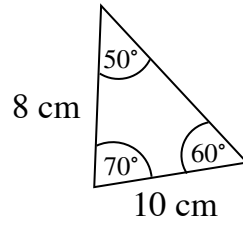
(Total for Question 1 is 2 marks)

2. Which two triangles are congruent?

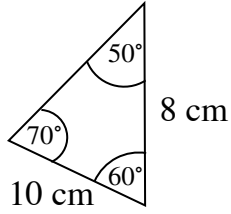
A



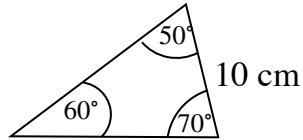
B



C



D



.....
(1)

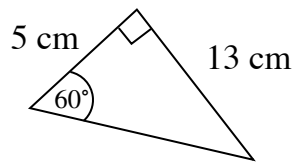
Give reason for your answer.

.....
.....
(1)

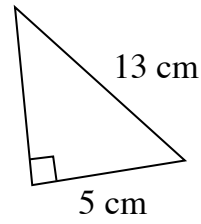
(Total for Question 2 is 2 marks)

3. Which two triangles are congruent?

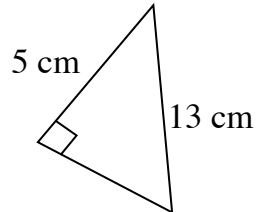
A



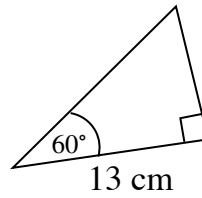
B



C



D



.....
(1)

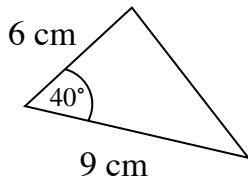
Give reason for your answer.

.....
.....
(1)

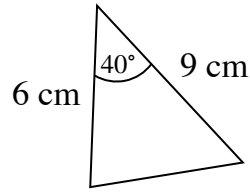
(Total for Question 3 is 2 marks)

4. Which two triangles are congruent?

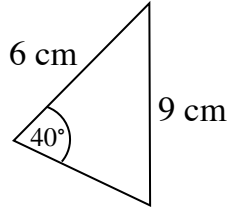
A



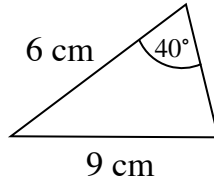
B



C



D



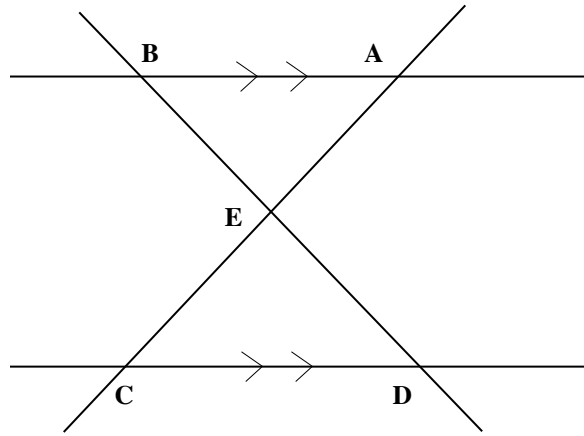
.....
(1)

Give reason for your answer.

.....
.....
(1)

(Total for Question 4 is 2 marks)

5.



AB is parallel to CD.

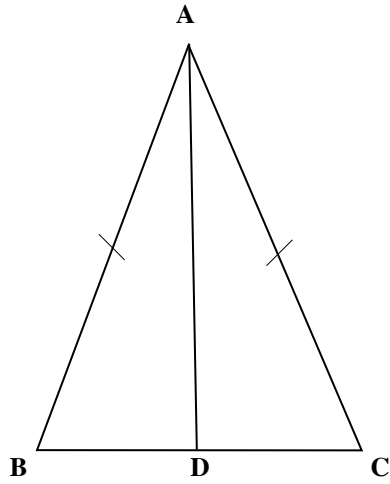
Lines AC and BD intersect at E.

$AE = CE$

Prove that triangle AEB is congruent to triangle CED.

(Total for Question 5 is 4 marks)

6.



Triangle ABC is isosceles where $AB = AC$.

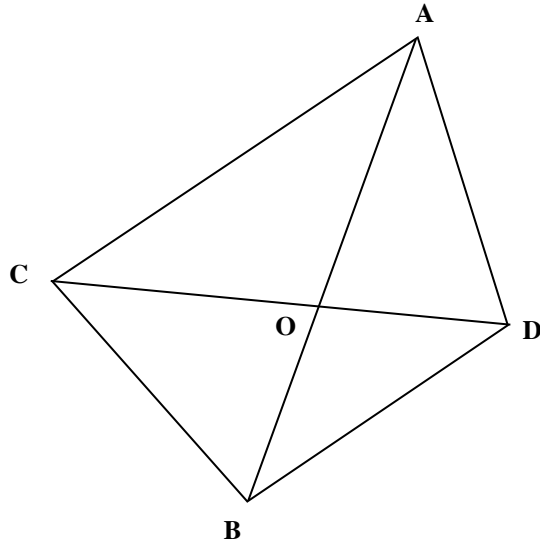
Point D lies on BC.

$$\angle BAD = \angle DAC$$

Prove that triangle ABD is congruent to triangle ACD.

(Total for Question 6 is 4 marks)

7.



Lines AB and CD cross at O.

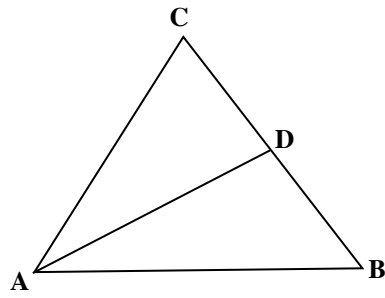
$$AO = CO$$

$$BO = DO$$

Prove that triangle AOD is congruent to triangle COB.

(Total for Question 7 is 4 marks)

8.



Triangle ABC has line AD drawn to BC

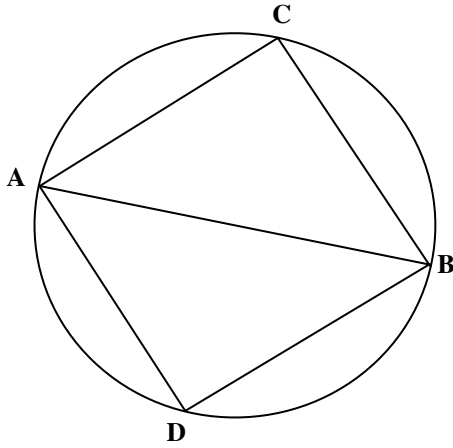
$$AB = AC$$

AD bisects angle A

Prove that triangle ABD is congruent to triangle ACD.

(Total for Question 8 is 4 marks)

9.



AB is the diameter of a circle.

$AC = AD$

Point C and D lie on the circumference of the circle.

Prove that triangle ACB is congruent to triangle ADB.

(Total for Question 9 is 4 marks)
