ODM EDUCATIONAL GROUP
Changing your Tomorrow

PERIOD 1

MATHEMATICS

CHAPTER NUMBER :~ 7
CHAPTER NAME :~ TRIANGLES

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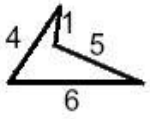
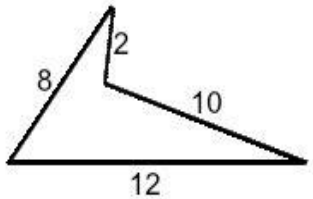
LEARNING OUTCOME:-

1.Sudents will no the difference between similar and congruent figures.

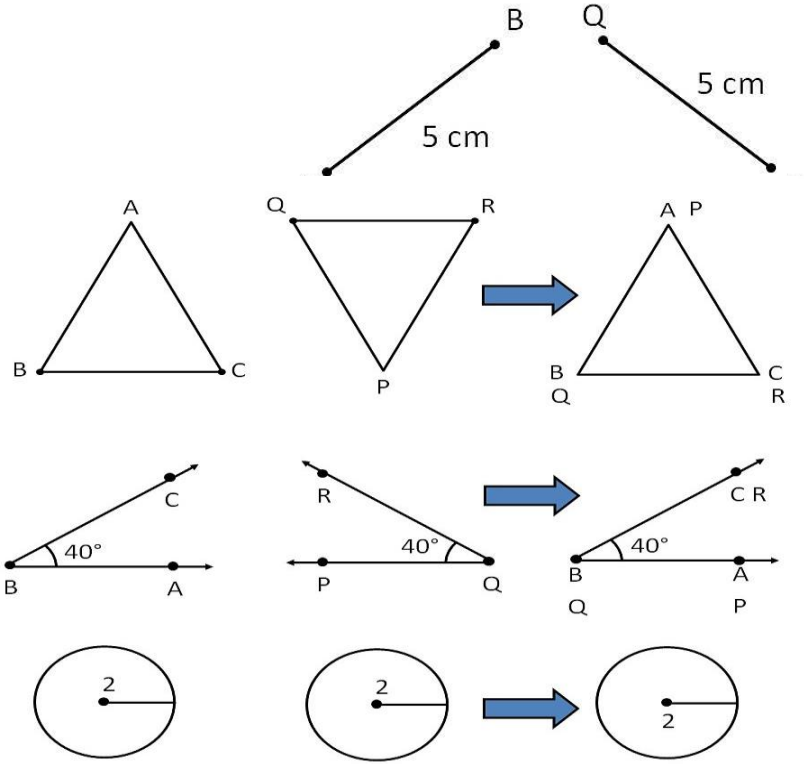
2 . Students will learn the criteria for congruence(SAS) in this module.

SIMILAR FIGURES





CONGRUENT FIGURES



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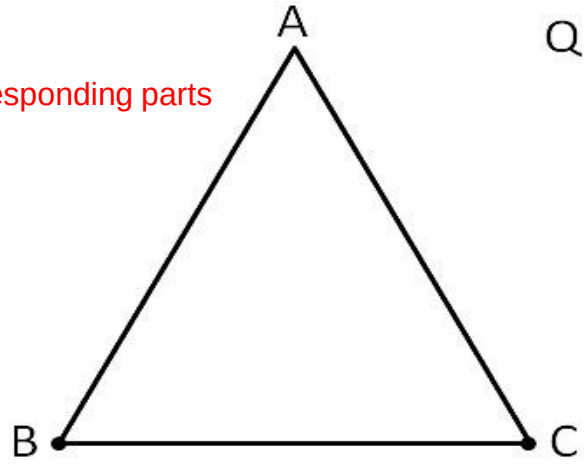
SIMILAR FIGURES:

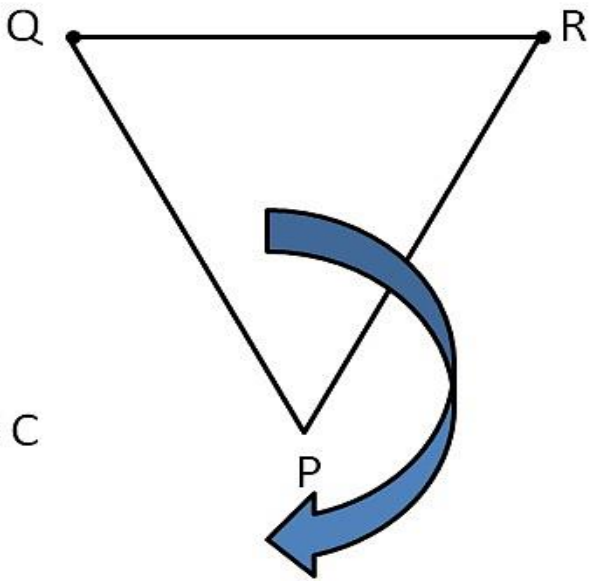
Same shape, different size

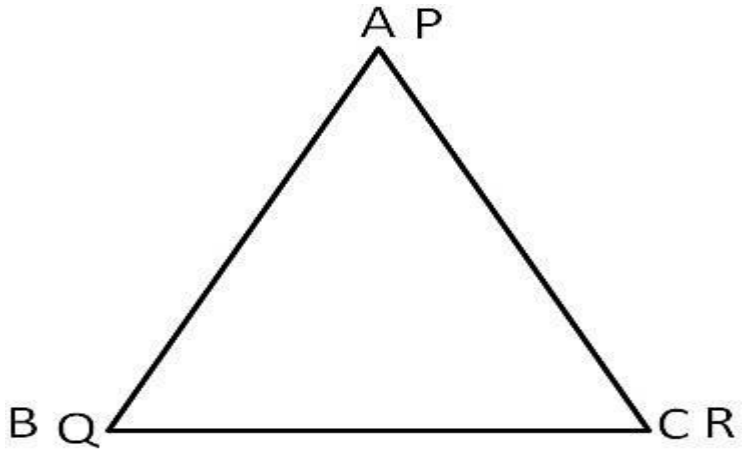
CONGRUENT FIGURES

Same shape, Same size

Corresponding parts







$\Delta ABC \cong \Delta PQR$

$\Rightarrow A \leftrightarrow P, B \leftrightarrow Q, C \leftrightarrow R$

$AB \leftrightarrow PQ$

$BC \leftrightarrow QR$

$CA \leftrightarrow RA$

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AXIOM 7.1

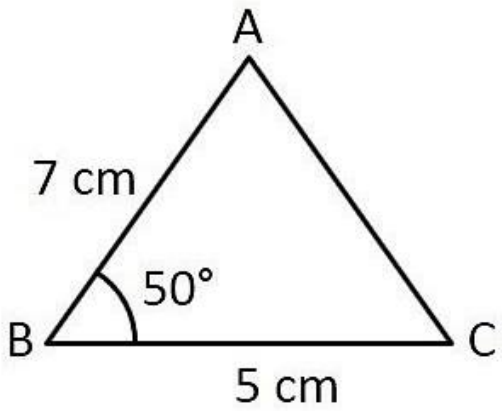
SAS congruence rule

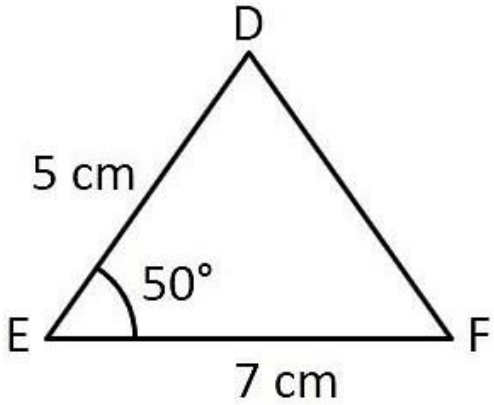
Two triangles are congruent if two sides and the included angle of one triangle are equal to the two sides and included angle of another triangle.

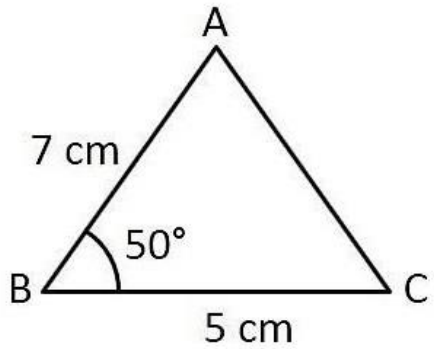
Given below are measurements of some parts of two triangles. Examine whether the two triangles are congruent or not, by using SAS congruence rule. If the triangles are congruent, write them in symbolic form.

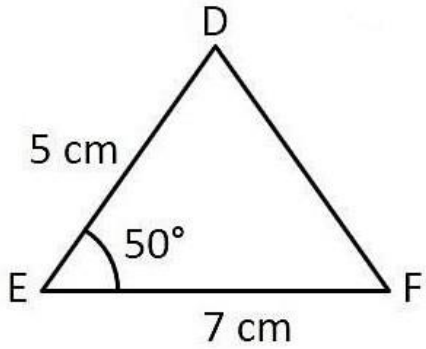
ΔABC **ΔDEF**

(a) AB = 7 cm, BC = 5 cm, ∠B = 50° DE = 5 cm, EF = 7 cm, ∠E = 50°









In ΔABC and ΔFED

AB = FE *(Both are 7 cm)*

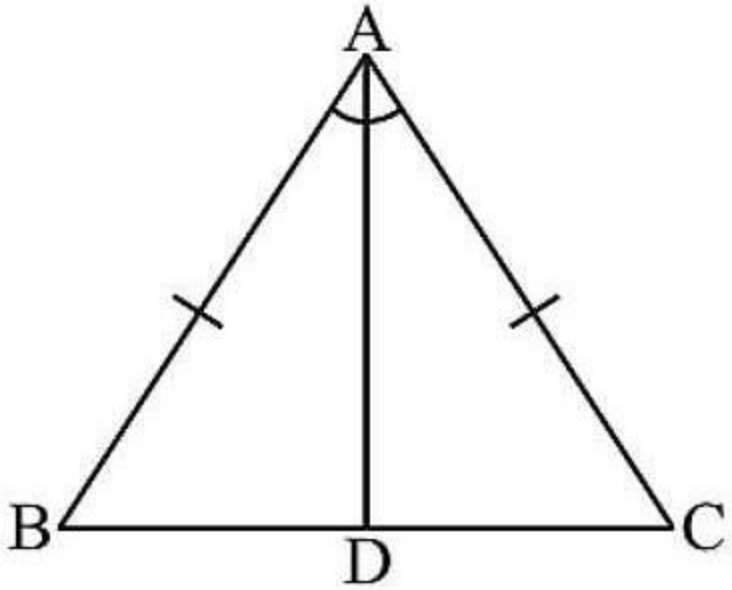
∠B = ∠E *(Both are 50°)*

BC = ED *(Both are 5 cm)*

∴ ΔABC ≅ ΔFED *(SAS Congruence Rule)*

In Fig AB = AC and AD is the bisector of ∠BAC.

(i) State three pairs of equal parts in triangles ADB and ADC.



In ΔADB and ΔADC,

$AB = AC$ *(Given)*

$\angle BAD = \angle CAD$ *(AD is bisector of $\angle BAC$ common)*

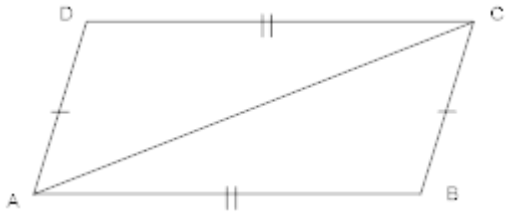
$AD = AD$ *(Common)*

HOMEWORK ASSIGNMENT

Exercise 7.1 Qno 1,2,3,4

AHA

1. IN fig, if ABCD is a quadrilateral in which AD= CB, AB=CD, and D=B, then CAB is equal to



(A) ACD

(B) CAD

(C) ACD

(D) BAD

THANKING YOU

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