

Topic: Congruency - Lesson 2

Aim: To develop cooperative learning and to discover the tests for congruency

Content: Construction of triangles - conditions of Congruency

Outcomes: Discover the conditions for congruency of triangles through construction

Resources: Worksheet 'Congruence Group Work'
Teacher - protractor, compass, ruler
Students - protractor, compass, ruler, scissors, glue
Text book - 'Modern Mathematics 8' - Jones, Couchman and Carroll

Focus Question:

What are the minimum number of sides and/or angles needed to construct two triangles that are congruent?

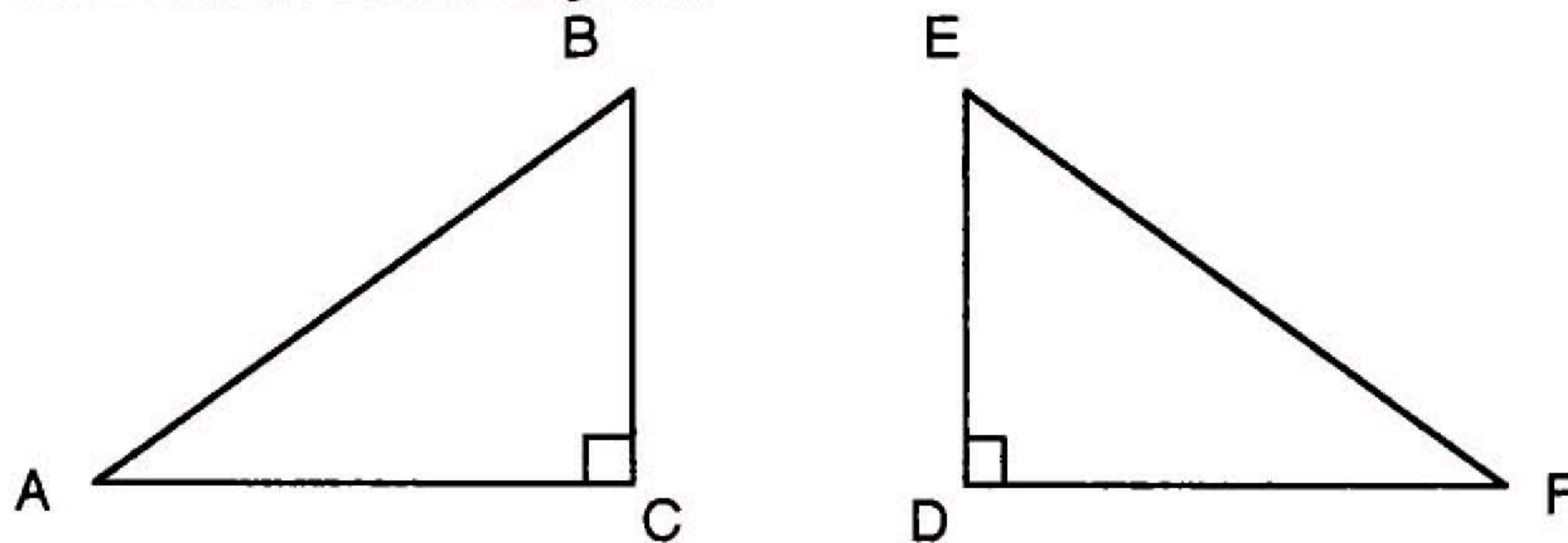
Lesson Plan:

1. Revision - corresponding sides and angles of congruent triangles

If two triangles are congruent, what do I mean?

Ten quick questions:

ΔABC and ΔFED are congruent.



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| 1. | Which angle is equal to $\angle A$? | $\angle F$ |
| 2. | Which angle is equal to $\angle D$? | $\angle C$ |
| 3.* | If $\angle A = 30$, $\angle B = 60$, what size is $\angle E$? | 60 |
| 4. | What size is $\angle D$? | 90 or right angle |
| 5. | Which line is equal to BC? | ED |
| 6. | Which line is equal to EF? | BA |
| 7.* | If $AB = 5$ cm, $BC = 3$ cm, $AC = 4$ cm, how long is DF? | 4 cm |
| 8. | How long is EF? | 5 cm |
| 9. | ΔABC and ΔFED are congruent. Write this in a shorthand way | $\Delta ABC \cong \Delta FED$ |
| 10. | Which is the hypotenuse of ΔABC ? | AB |

Query: Why do I say ΔFED and not ΔDEF ?

* Draw on diagram