Maths L9 Week 08 Homework

Homework Instruction:

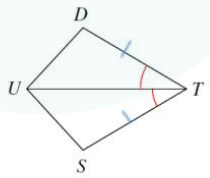
Answers to homework are provided to students. Students are supposed to check answers themselves and upload question numbers to our website that require teachers to explain in class. There is no need to upload the whole lot paper, only questions where students made mistakes in or requited additional support on.

Please choose from either Core OR Extend questions:

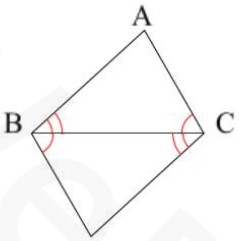
Part One： Core Questions

1. Show that the triangles are congruent, stating the congruency test used.

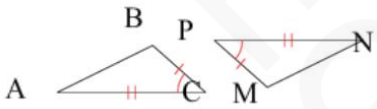
a.



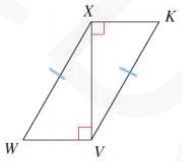
b.



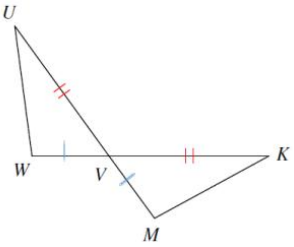
c.



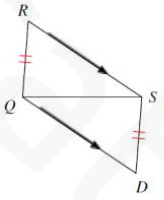
d.



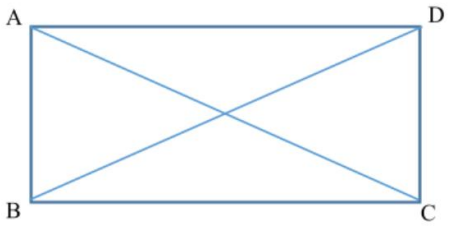
e.



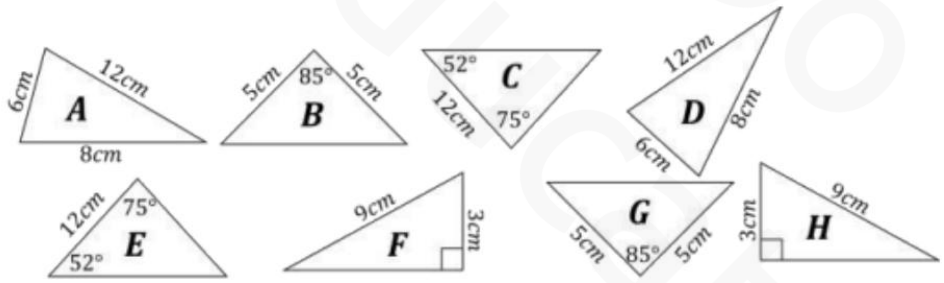
f.



2. ABCD is a rectangle. Prove that triangle ABC is congruent to triangle DCB.



3. Match up the pairs of congruent triangles and state your reasons.



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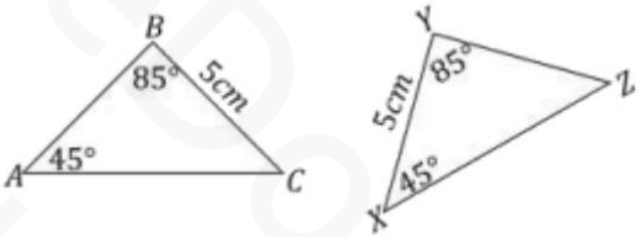
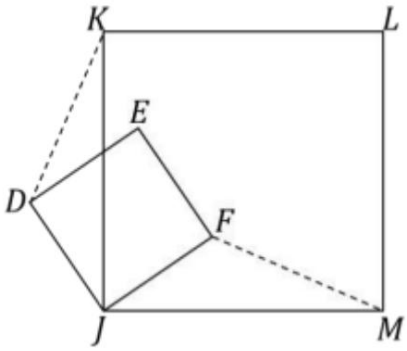
4. Given that it is a parallelogram, prove that the two triangles are congruent.

5. Alesha thinks that these two triangles are congruent. Explain why she is wrong.



Part Two: Extend Questions

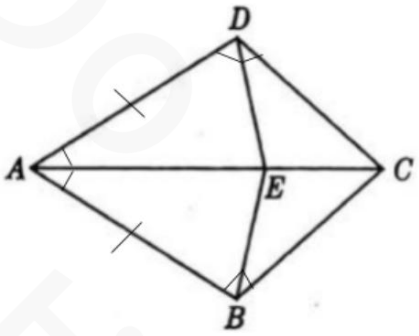
1. Below are two squares KLJM and DEFJ. Use congruent triangles to prove that triangle DJK is congruent to triangle FJM.



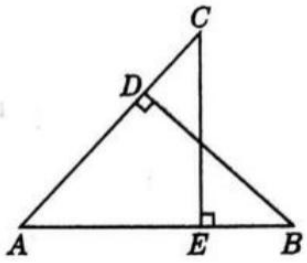
2. Given that AD=AB and DAC=∠BAC, prove that ∠CBE=∠CDE

Hint: Can you prove ADC is congruent to ABC.

Then move on to prove the angl equal?



3. Two right-angle triangles intercept as shown below. ∠AEC=∠BDA=90° and AD=AE. Prove that BE=CD.



4. Given that ∠1=∠2, ED=DE and EF is parallel to AB. Prove that AC=EF.

Hint: Draw another line from C that is parallel to EF.