Triangle similarity

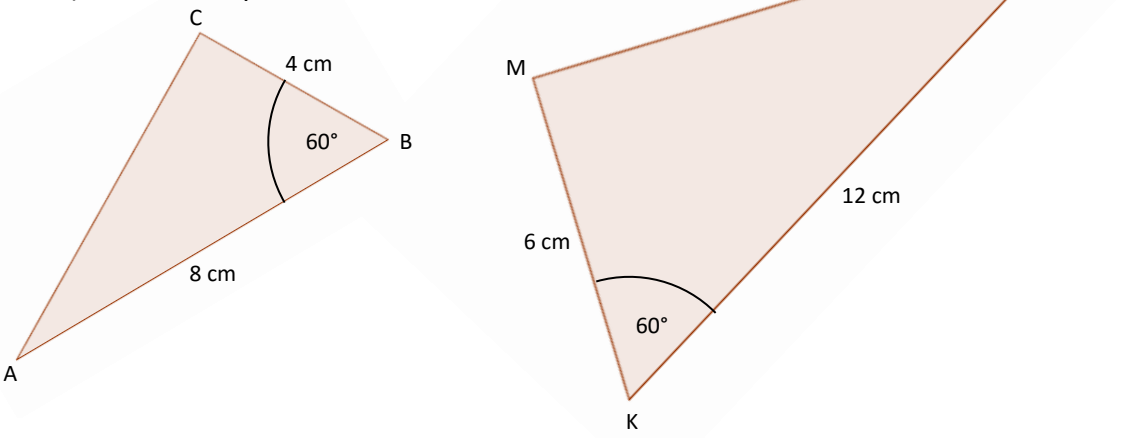
SOLUTION: main aim – revision of theorems about triangles´ similarity

Task: Decide if triangles are similar to each other in the picture. If so, write down the similarity in a correct form. If it is possible, write down similarity coefficient. Decide on the sentence about the theorem related to triangle similarity (uu,sss, sus).

Exercise 1: Decide about triangle similarity.

a) Are the triangles similar? Circle the correct answer. YES NO

b) If SO, complete the table.



Write down the triangle similarity	$\Delta ABC \sim \Delta LKM$
Write down the theorem about triangle similarity	sus
Write down the similarity coefficient	$k = 2 : 3 = 0,\overline{6}$

Prove the validity of the theorem for those triangles	$\lvert\sphericalangle ABC\rvert = \lvert\sphericalangle LKM\rvert$ $\frac{\lvert AB\rvert}{\lvert LK\rvert} = \frac{\lvert BC\rvert}{\lvert KM\rvert} = \frac{2}{3}$

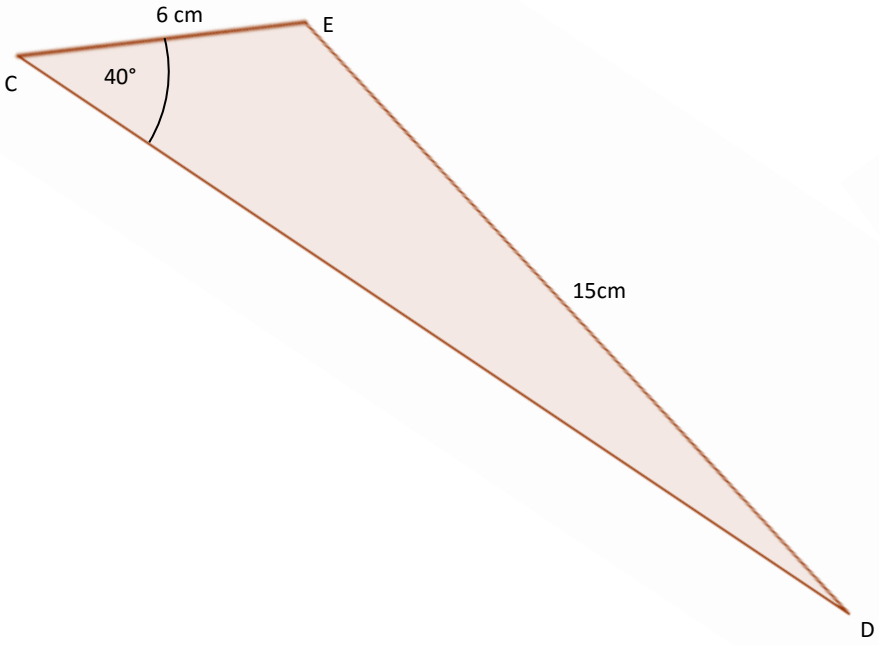
Module MATHS

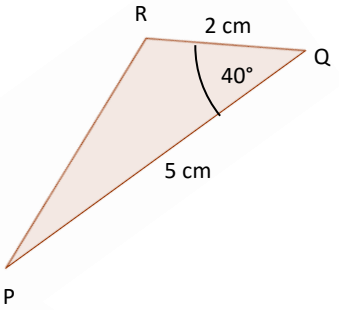
Methodology worksheet

Exercise 2: Decide about triangle similarity

a) Are the triangles similar? Circle the correct answer. YES NO

b) If SO, complete the table.



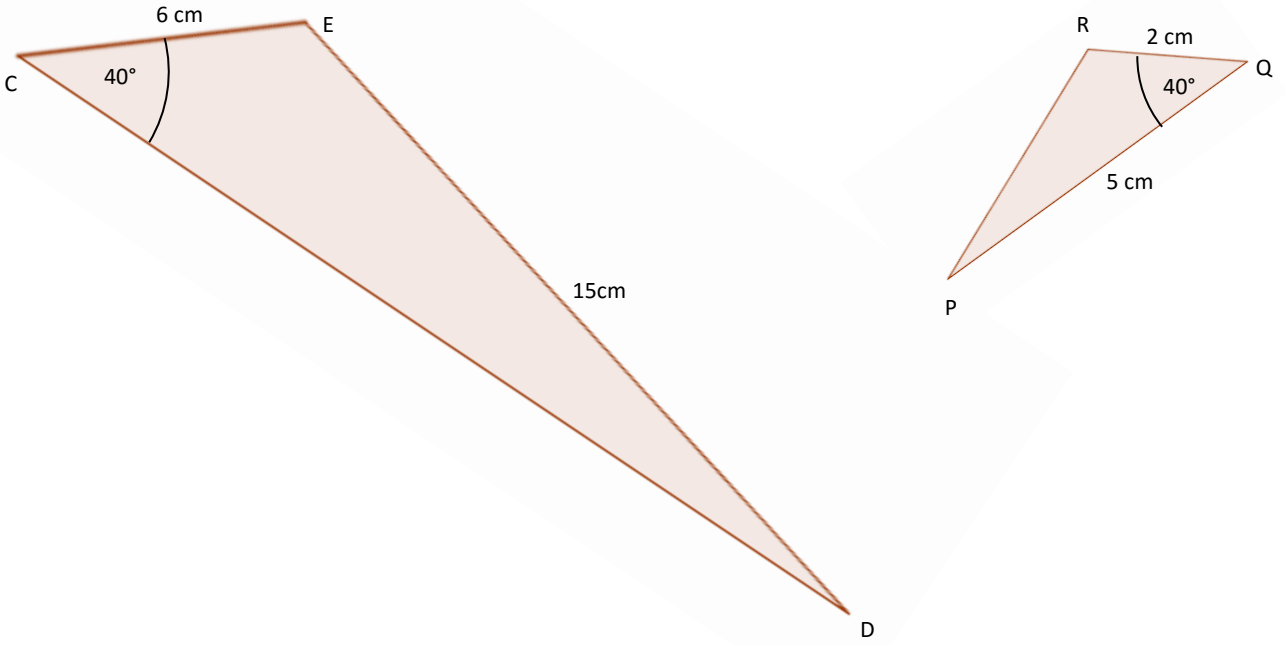


Write down the triangle similarity	
Write down the theorem about triangle similarity	
Write down the similarity coefficient	
Prove the validity of the theorem for those triangles	

Exercise 3: Decide about triangle similarity

a) Are the triangles similar? Circle the correct answer. (YES) NO

c) If SO, complete the table.

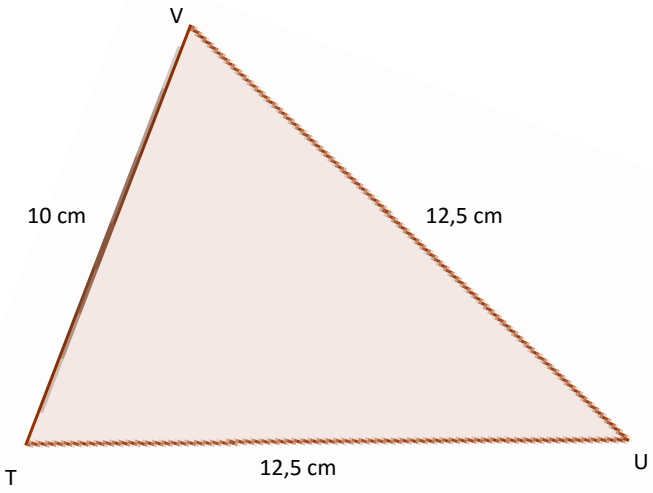


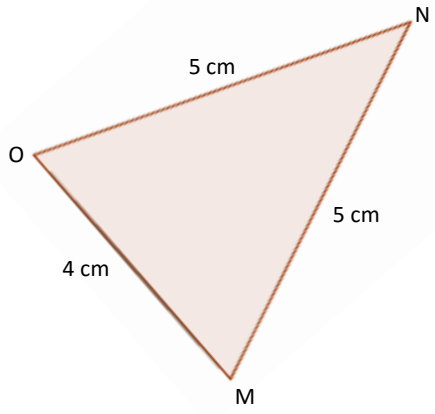
Write down the triangle similarity	$\Delta KLM \sim \Delta ZXY$
Write down the theorem about triangle similarity	uu
Write down the similarity coefficient	Cannot be determined
Prove the validity of the theorem for those triangles	$\lvert\sphericalangle KLM\rvert = \lvert\sphericalangle ZXY\rvert = 45°$ $\lvert\sphericalangle LKM\rvert = \lvert\sphericalangle XZY\rvert = 30°$ $\lvert\sphericalangle KML\rvert = \lvert\sphericalangle ZYX\rvert = 105°$

Exercise 4: Decide about triangle similarity

a) Are the triangles similar? Circle the correct answer. (YES) NO

b) If SO, complete the table.





Write down the triangle similarity	$\Delta TUV \sim \Delta MNO$
Write down the theorem about triangle similarity	sss
Write down the similarity coefficient	$k = 5 : 2 = 2{,}5$
Prove the validity of the theorem for those triangles	$\frac{\|TU\|}{\|MN\|} = \frac{\|UV\|}{\|NO\|} = \frac{\|TV\|}{\|MO\|} = \frac{5}{2}$