EGD Grade 11

Interpenetrations

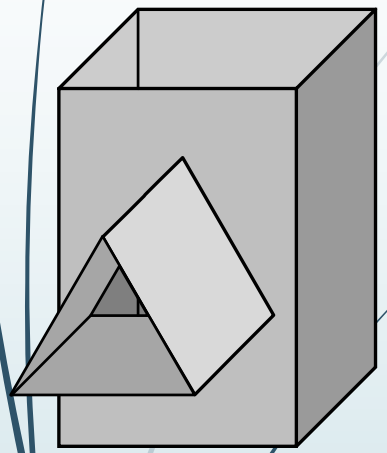
Developed by: PC Viljoen

Senior Educational Specialist for

Engineering Graphics and Design

Free State Province

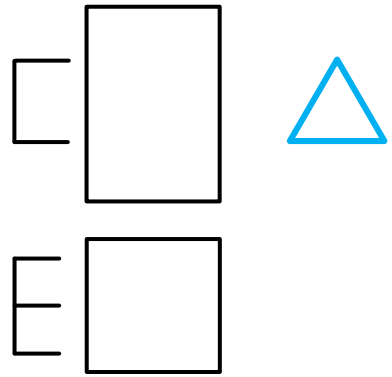
What is interpenetrations?



Question 2: Interpenetration
Given:
* The incomplete front view and top view of an equilateral triangular prism that has to fit around a square prism. The axes of both prisms lie in a common vertical plane
* An auxiliary view of the triangular prism

Instructions:
Draw, to scale 1:1, the following:
1. The given top view
2. The complete front view clearly showing the curve of interpenetration
1. The complete left view

* Show ALL hidden detail
* Shw ALL necessary construction.



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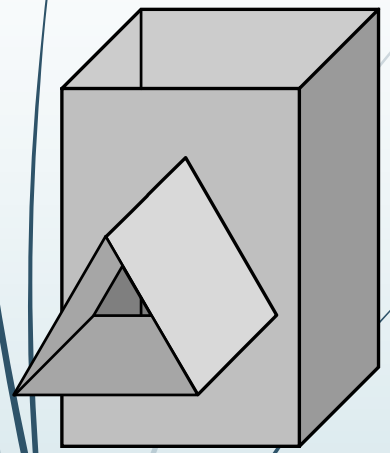

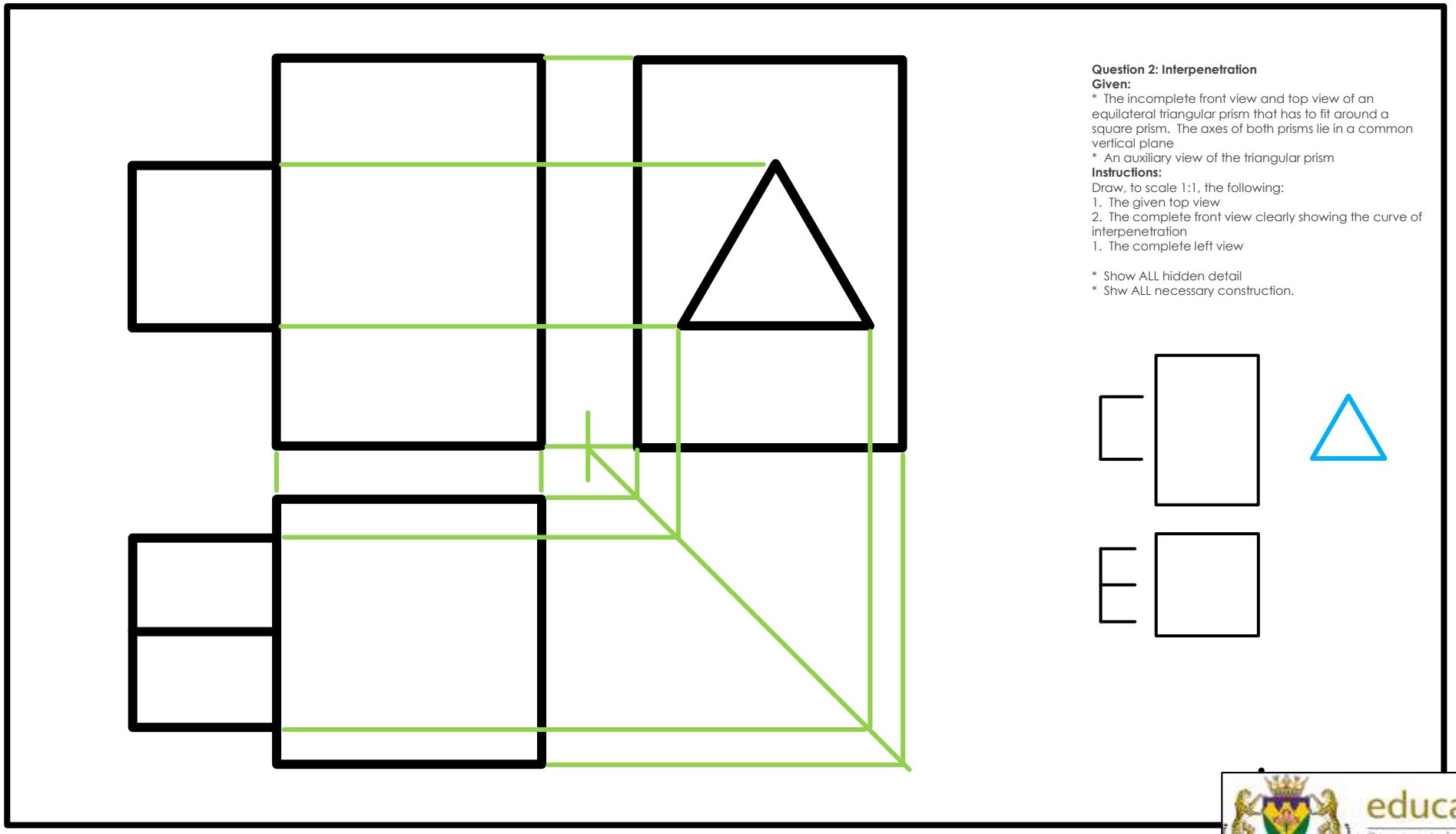

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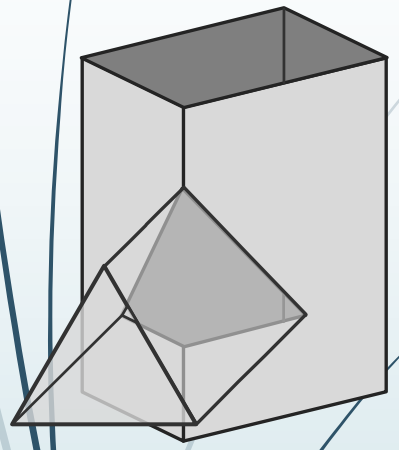

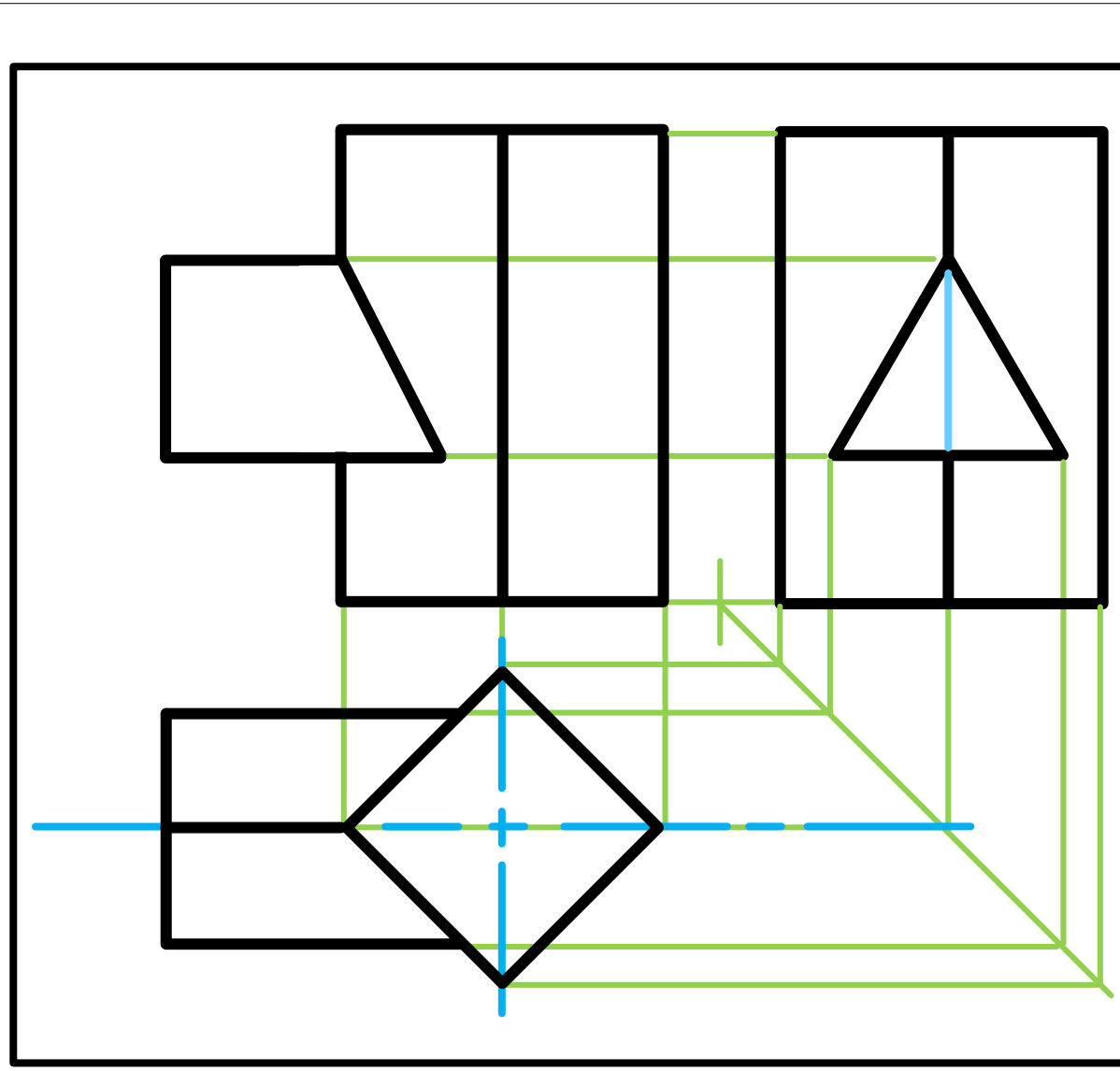

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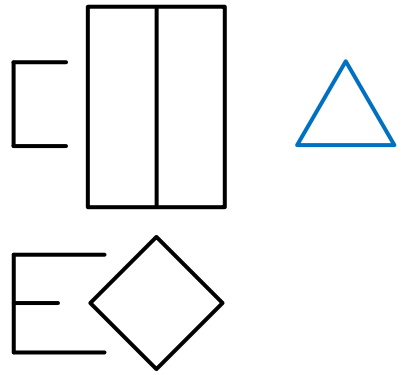

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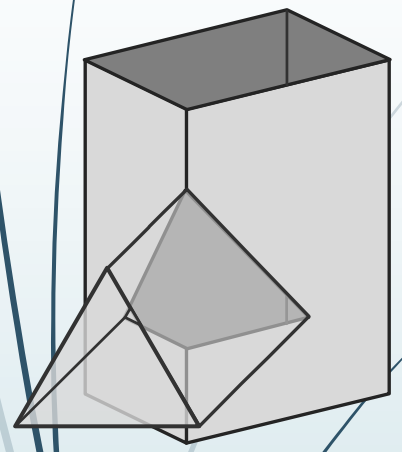
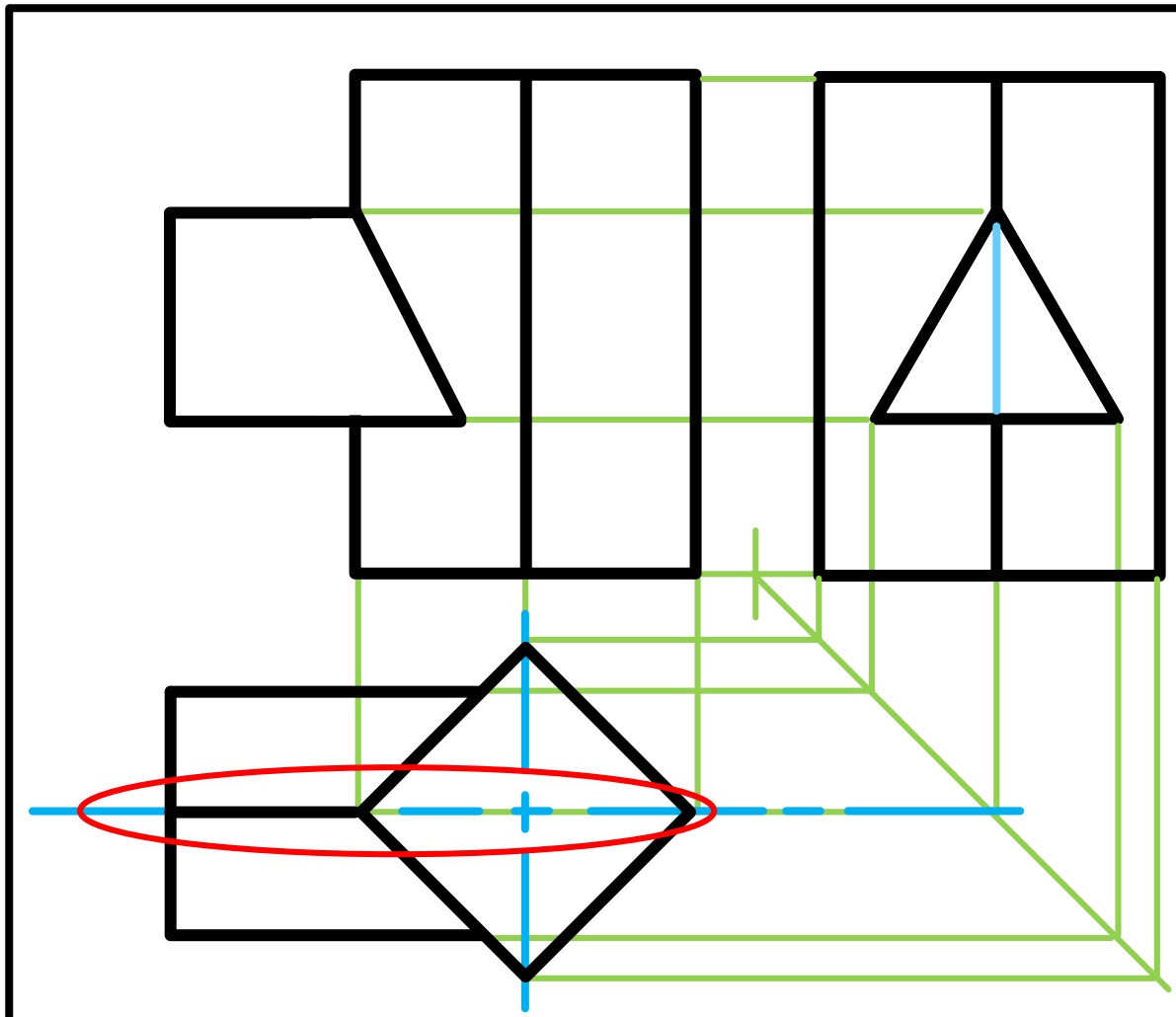
What is interpenetrations?

Grade 11 content:
The curves of interpenetration have to be symmetrical.





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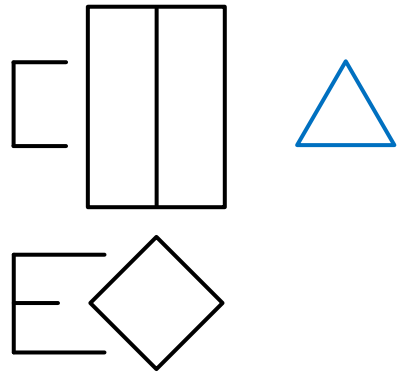

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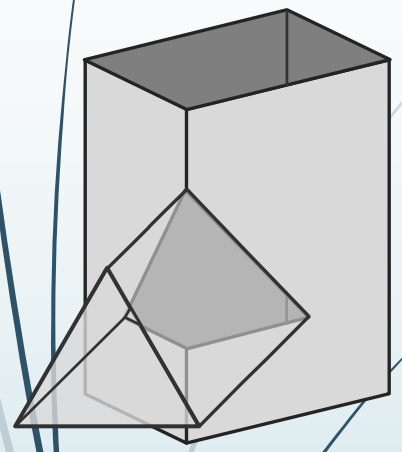
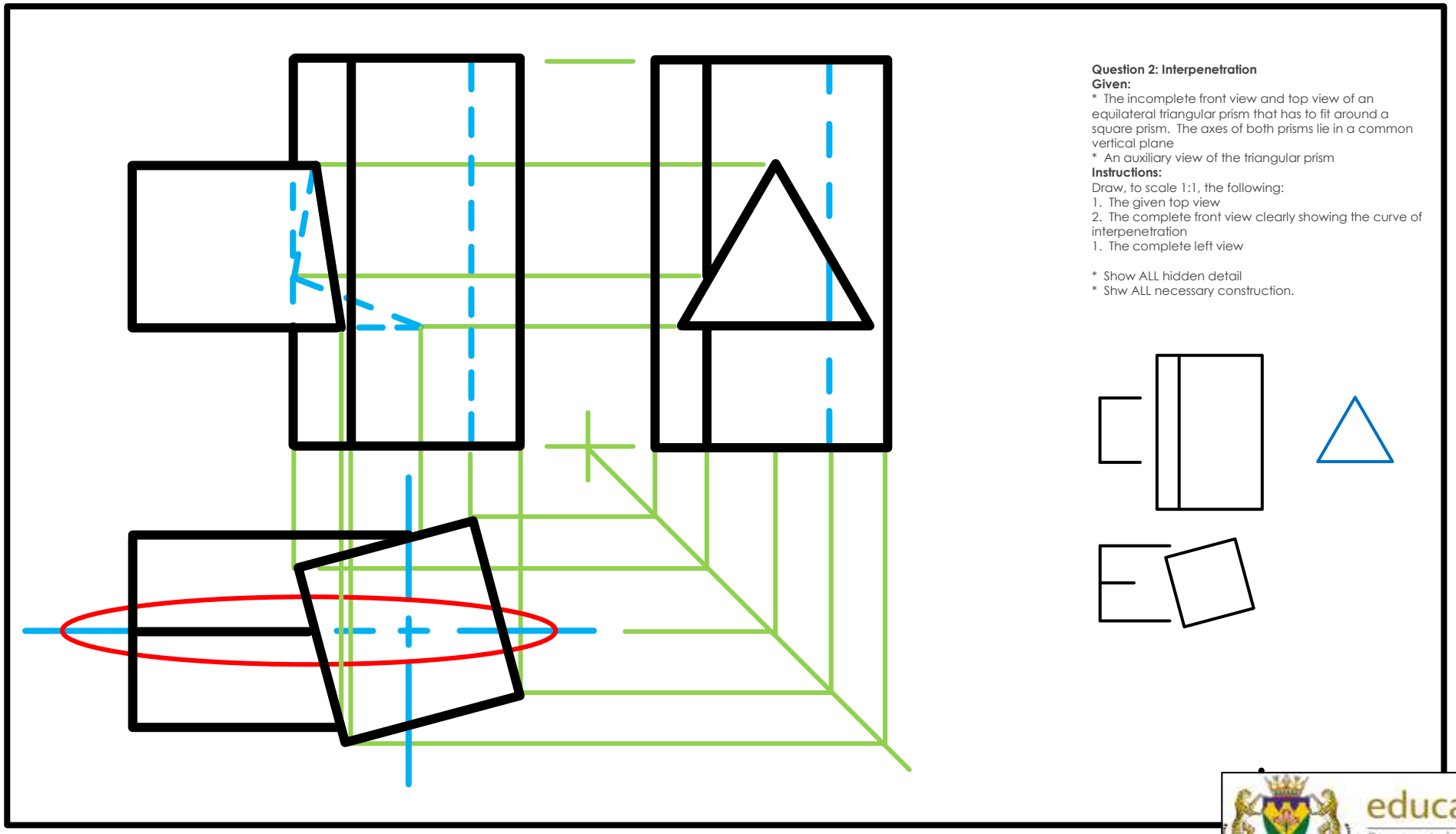
Grade 12 content:
The curves of interpenetration can be non-symmetrical.





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