

Interpenetrations

EGD Grade 11 & 12 (Revision)

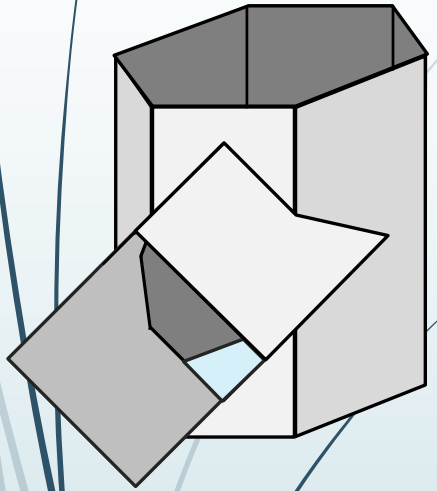
Developed by: PC Viljoen

Senior Educational Specialist for
Engineering Graphics and Design

Free State Province

Interpenetrations

Method 1: If branch is horizontal



Question 2: Interpenetration

Given:

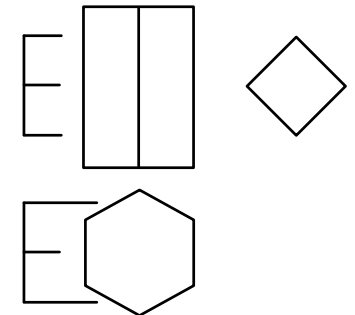
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

Instructions:

Draw, to scale 1:1, the following:

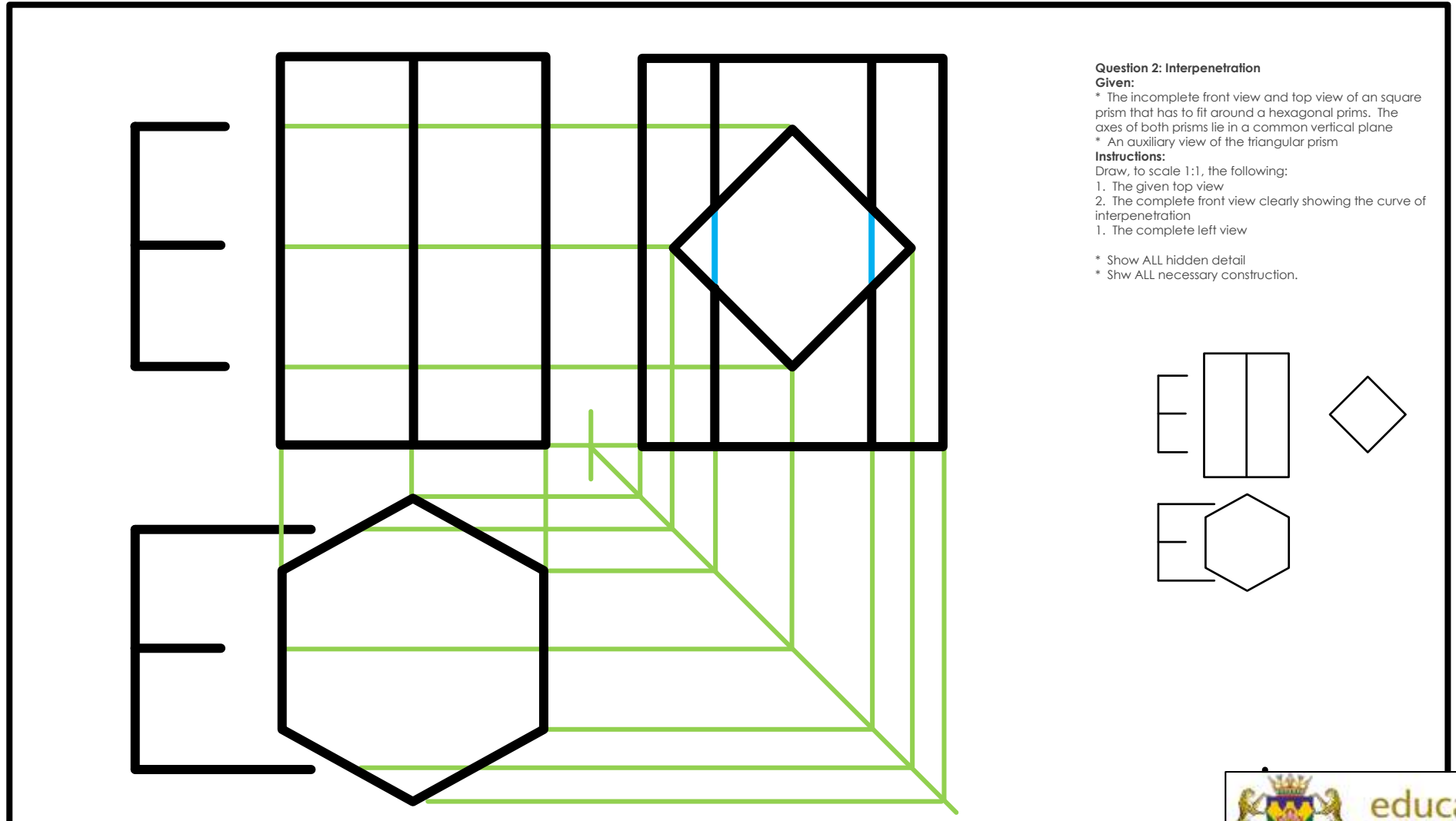
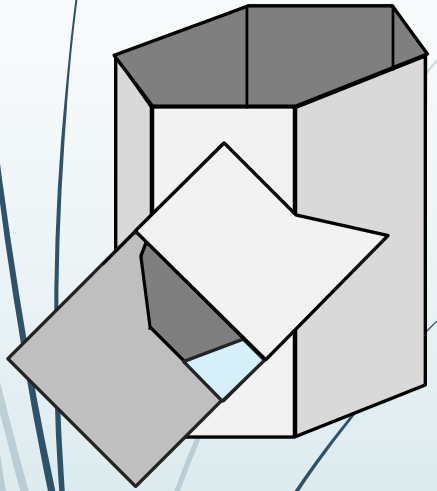
1. The given top view
2. The complete front view clearly showing the curve of interpenetration
1. The complete left view

- * Show ALL hidden detail
- * Show ALL necessary construction.



Interpenetrations

Step 1



Question 2: Interpenetration

Given:

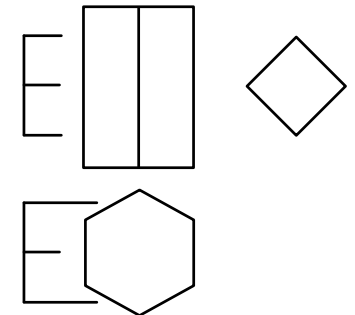
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
 - * Show ALL necessary construction.

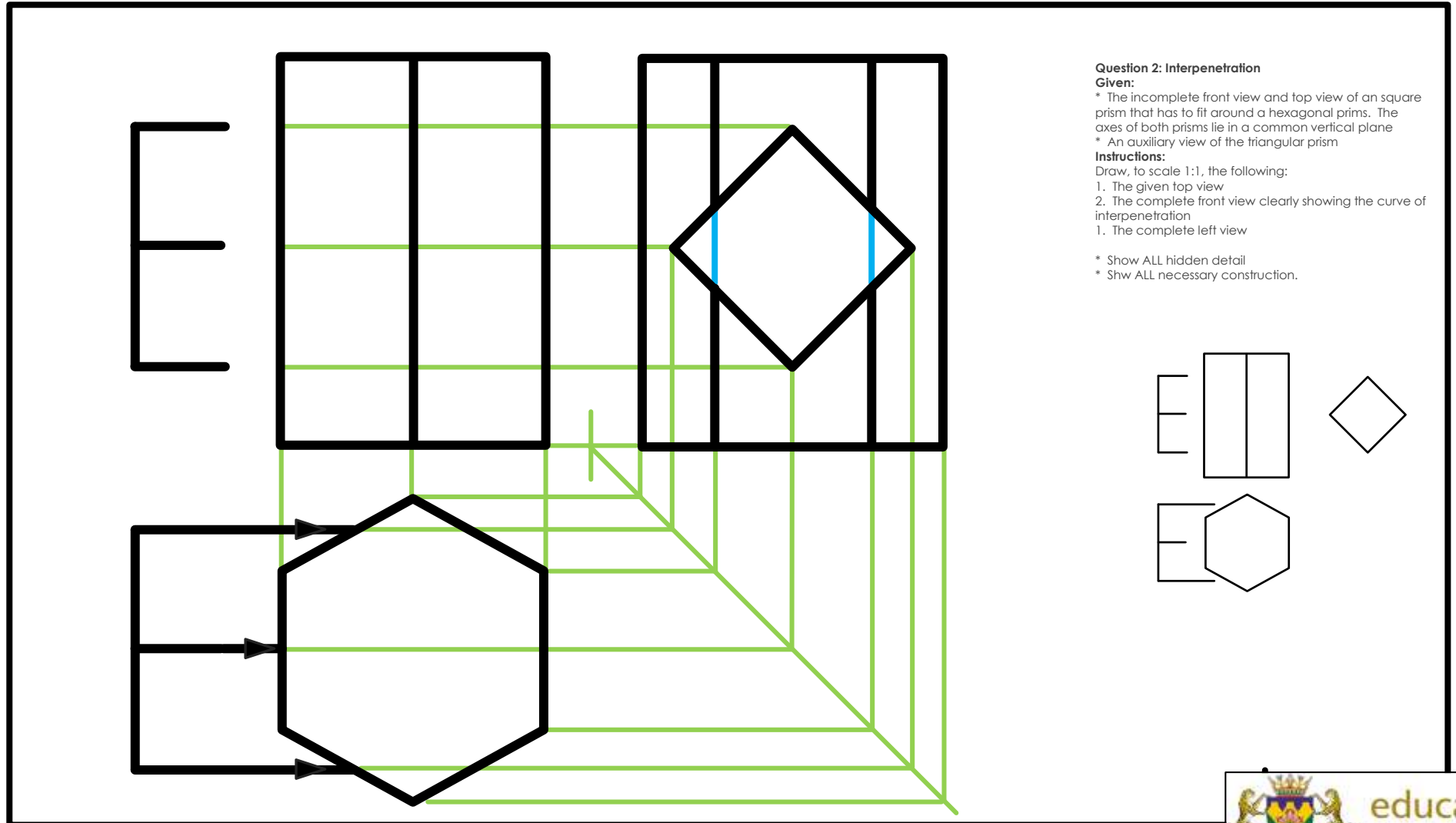
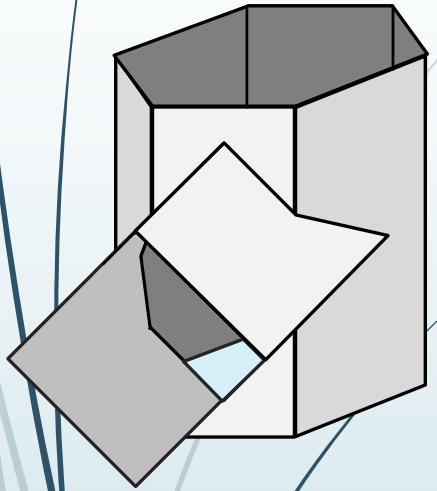


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step 2



Question 2: Interpenetration

Given:

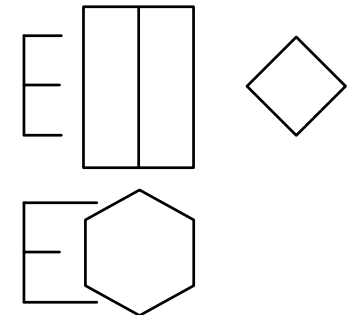
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

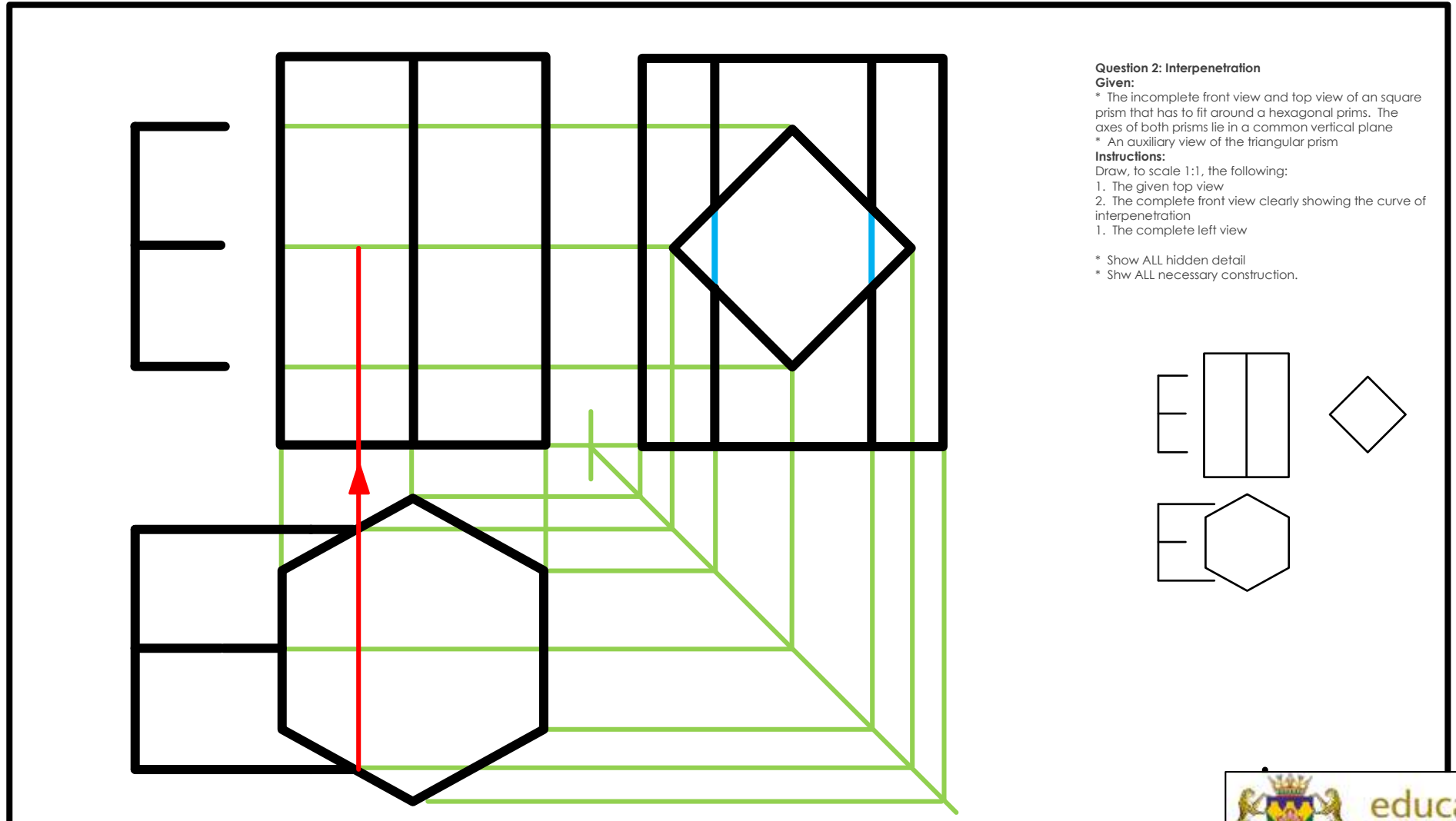
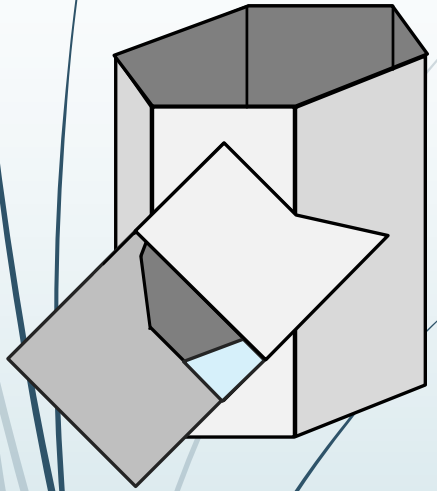


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Step 3



Question 2: Interpenetration

Given:

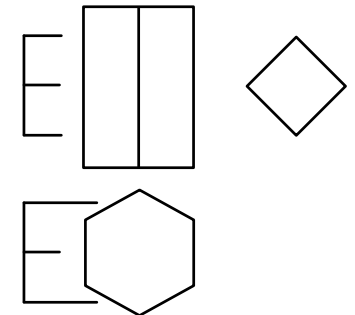
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
 - * Show ALL necessary construction.

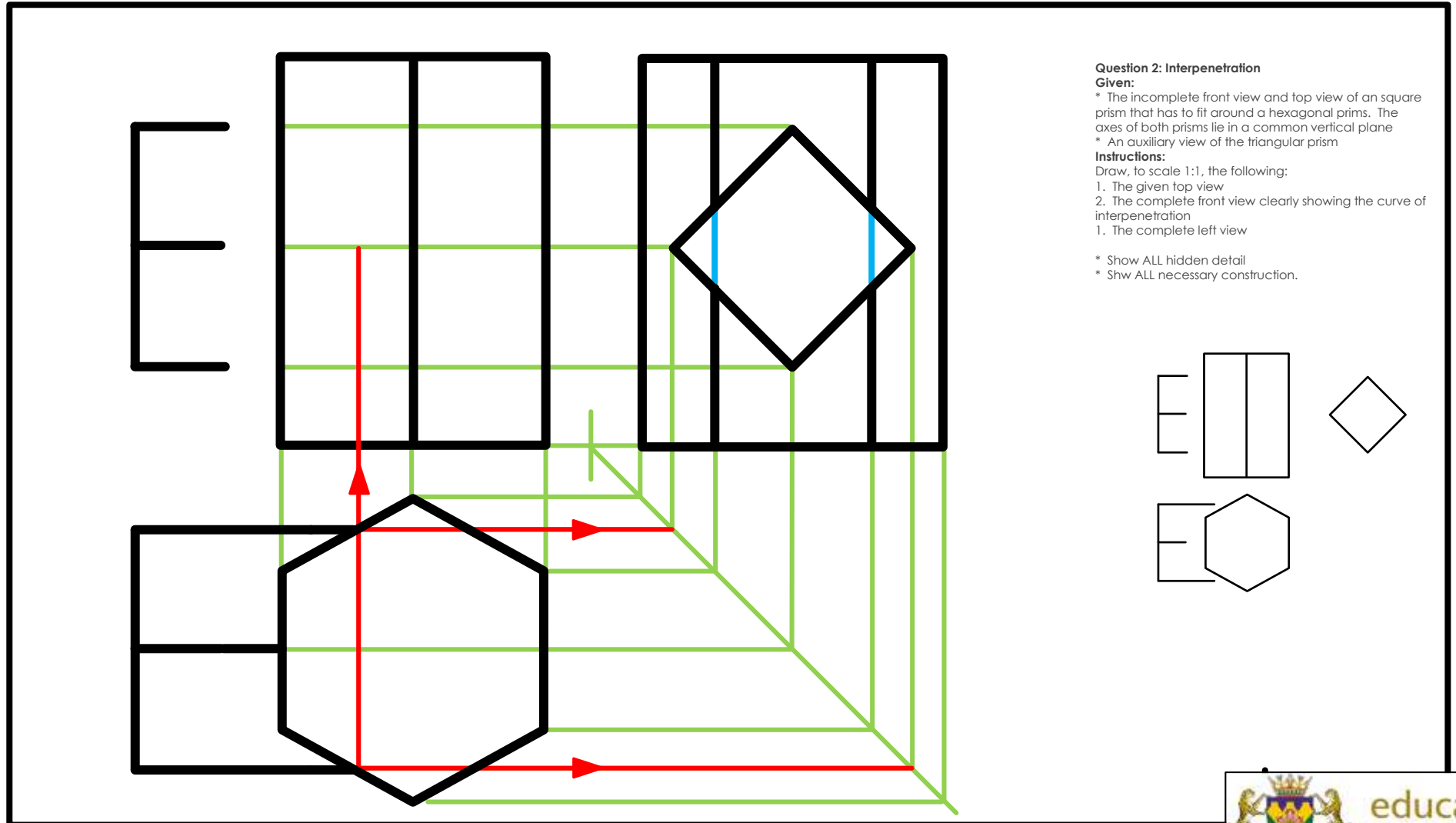
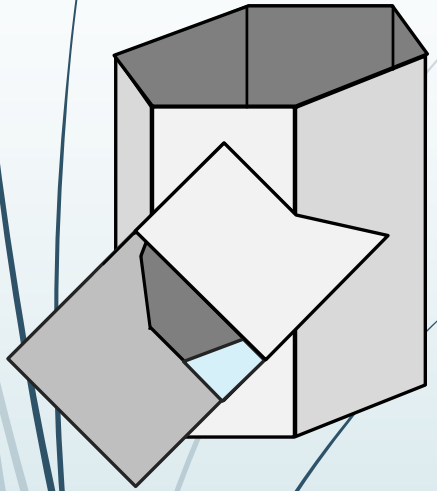


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Step 4



Question 2: Interpenetration

Given:

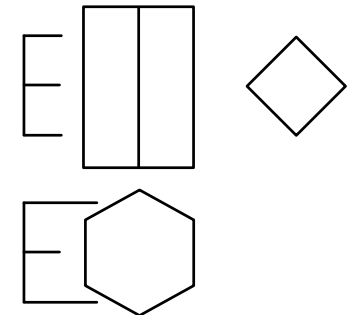
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

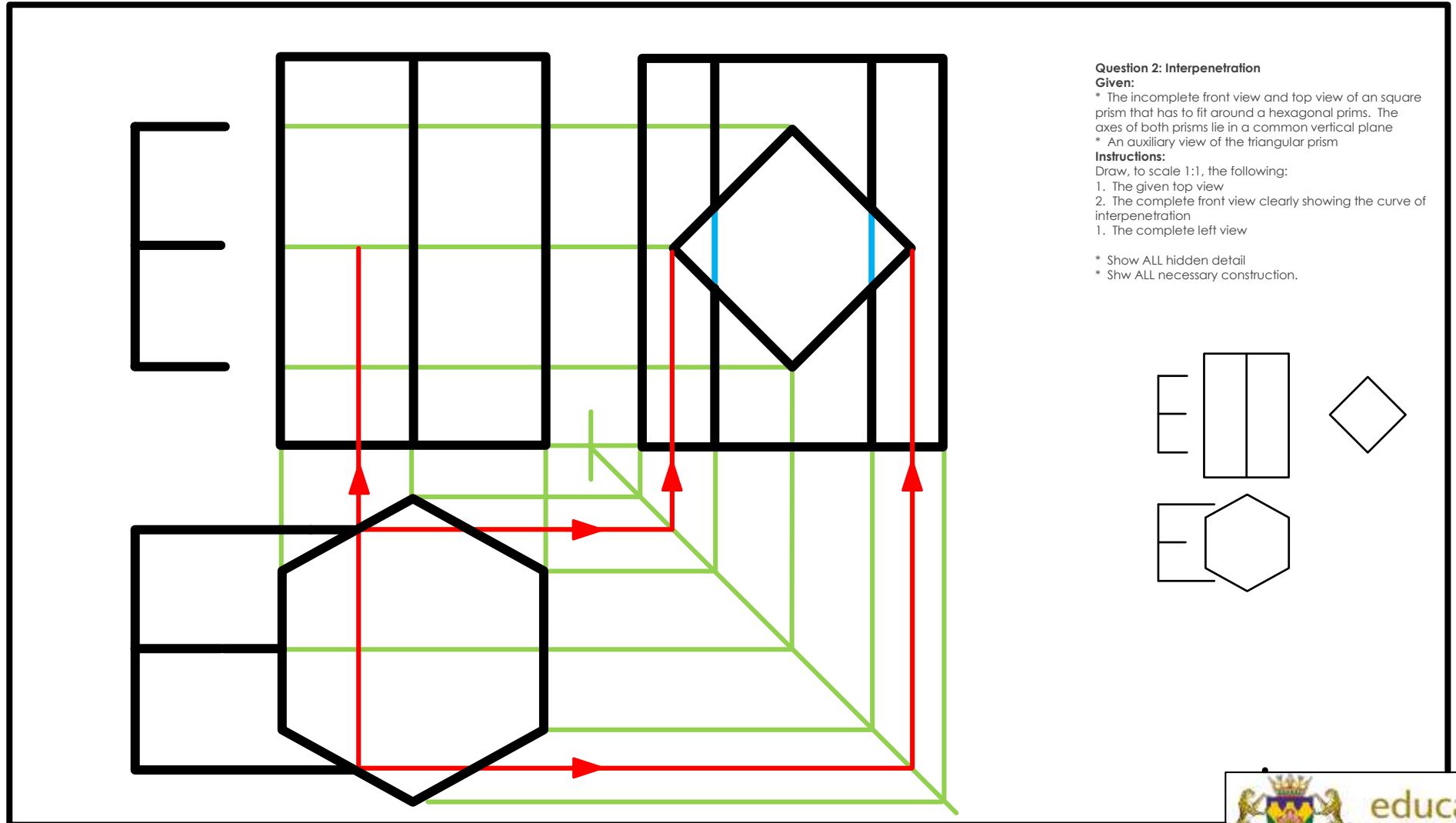
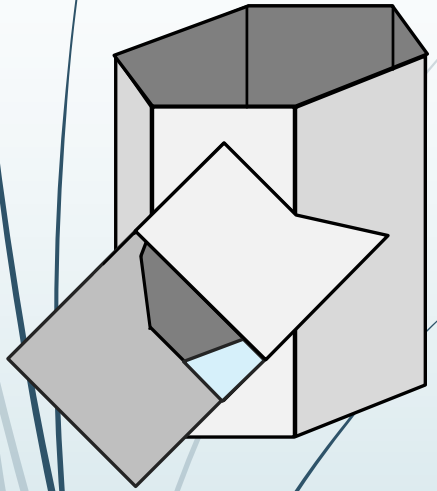


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Step 5



Question 2: Interpenetration

Given:

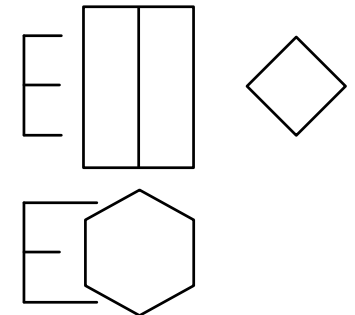
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

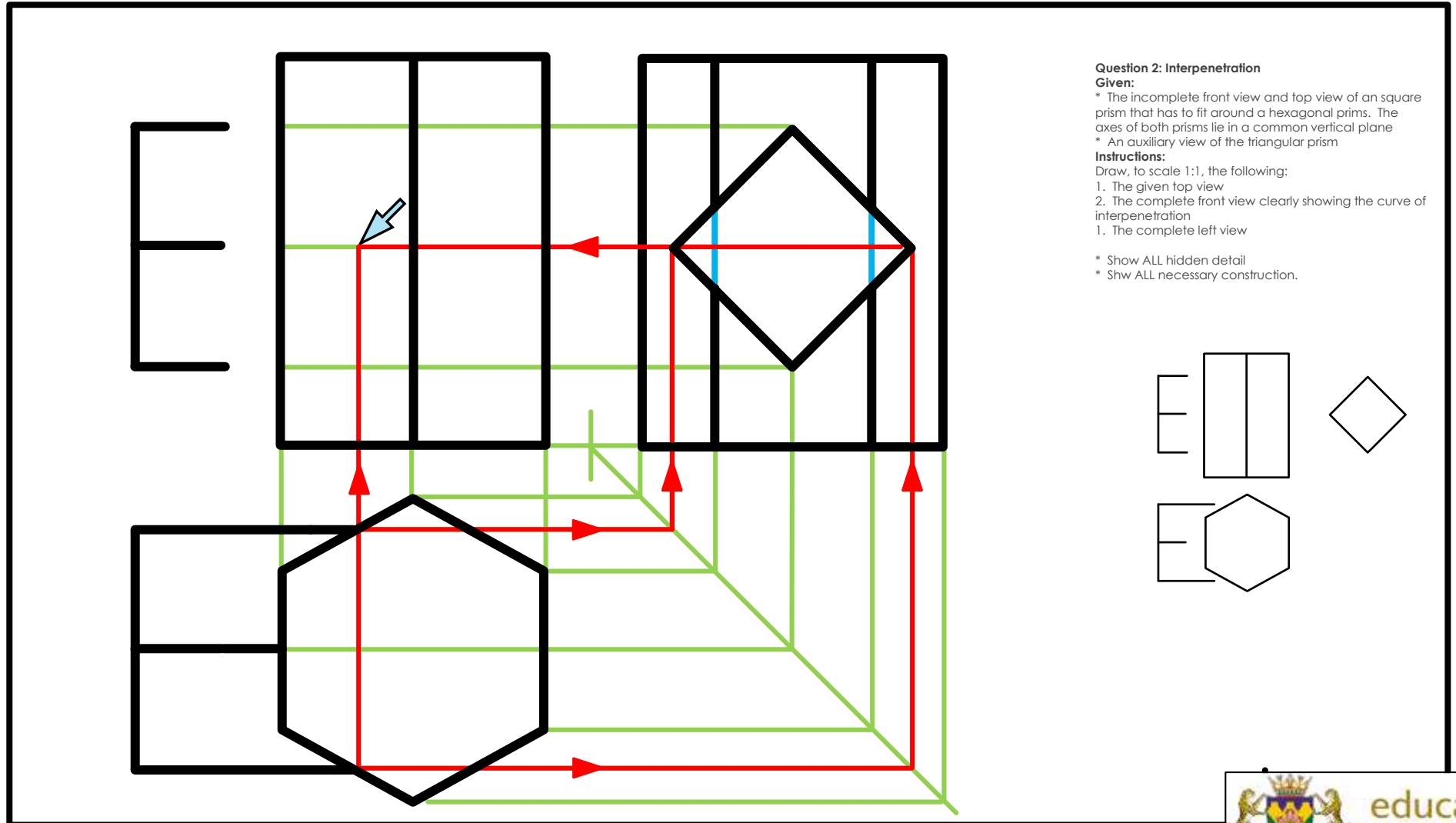
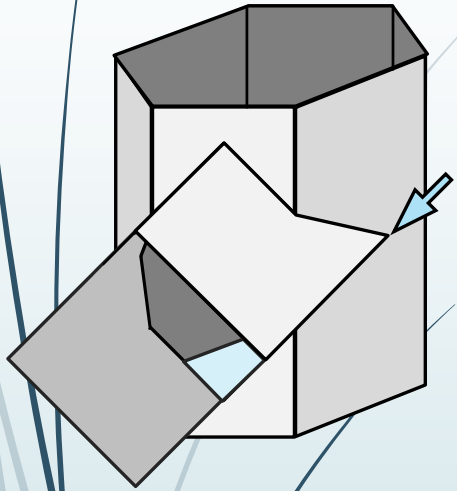


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Step 6



Question 2: Interpenetration

Given:

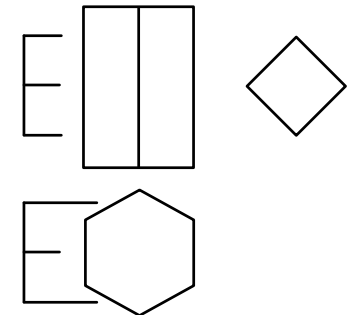
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

Instructions:

Draw, to scale 1:1, the following:

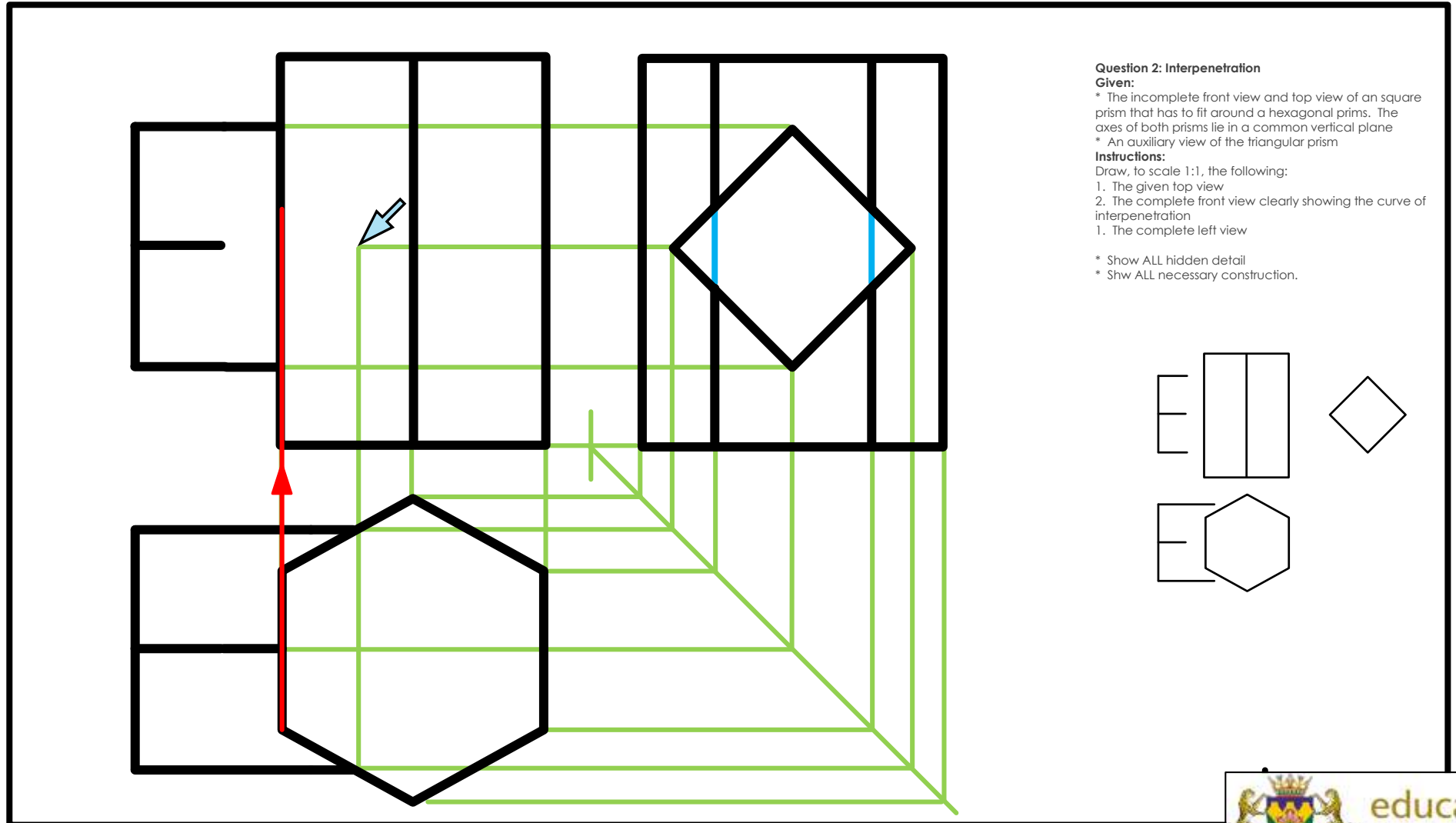
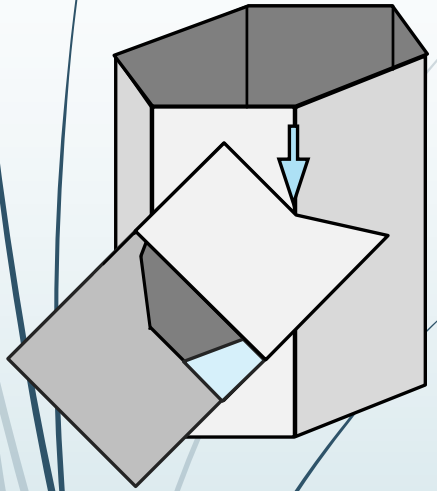
1. The given top view
2. The complete front view clearly showing the curve of interpenetration
1. The complete left view

- * Show ALL hidden detail
- * Show ALL necessary construction.



Interpenetrations

Step 7



Question 2: Interpenetration

Given:

- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

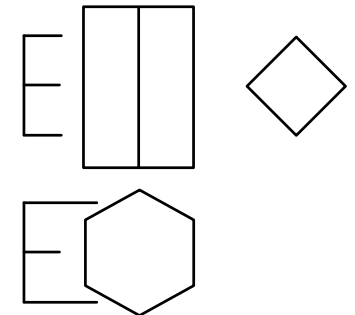
Instructions:

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
- * Show ALL necessary construction.

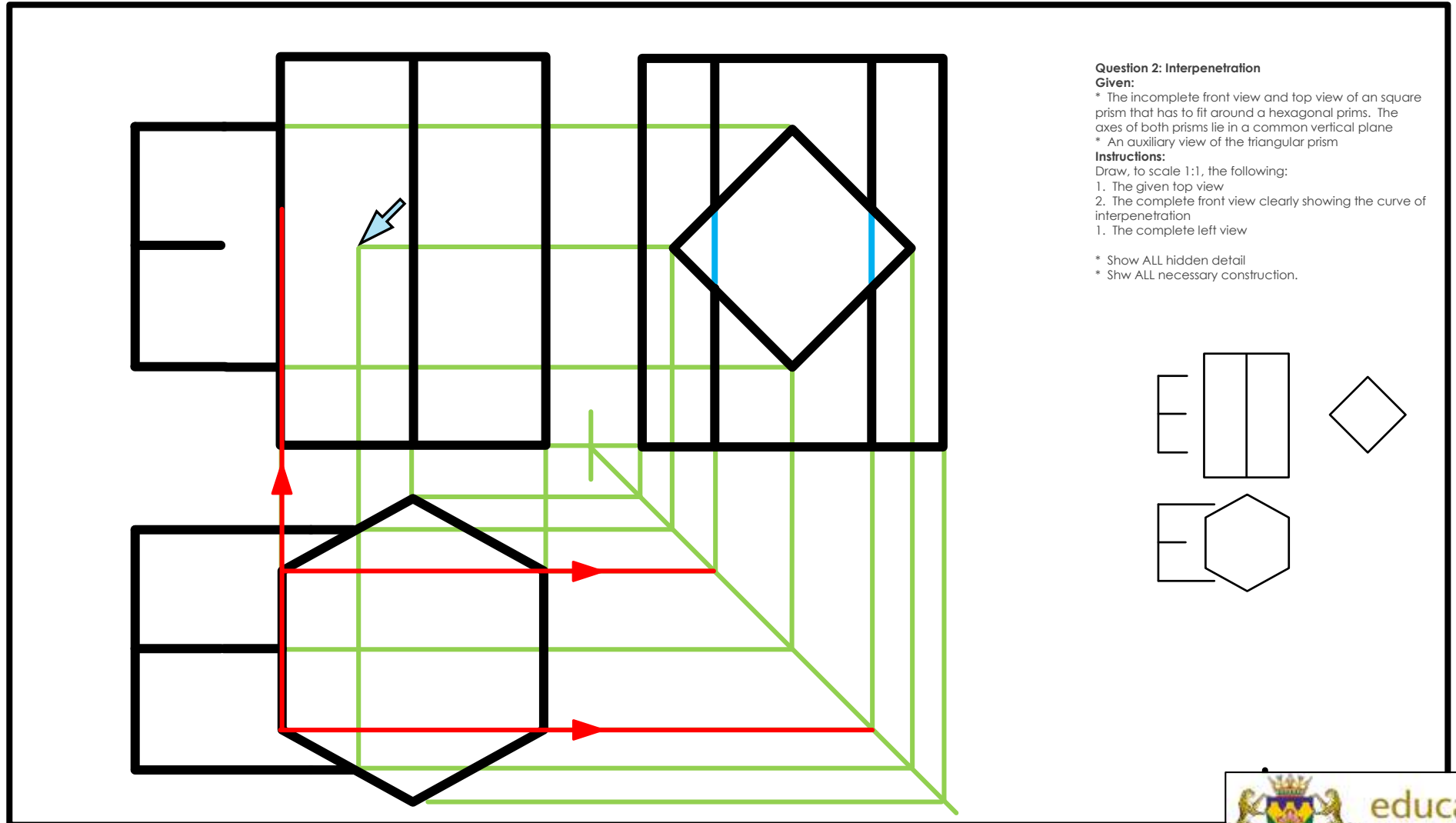
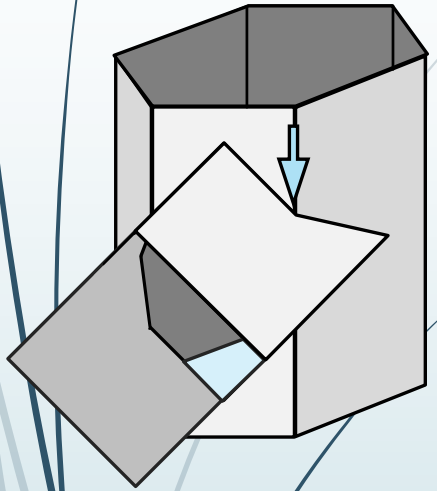


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Step 8



Question 2: Interpenetration

Given:

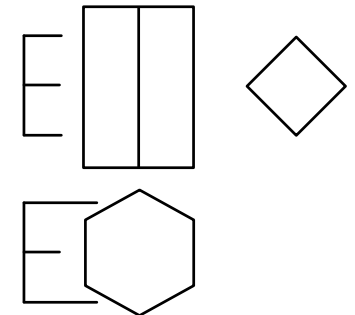
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

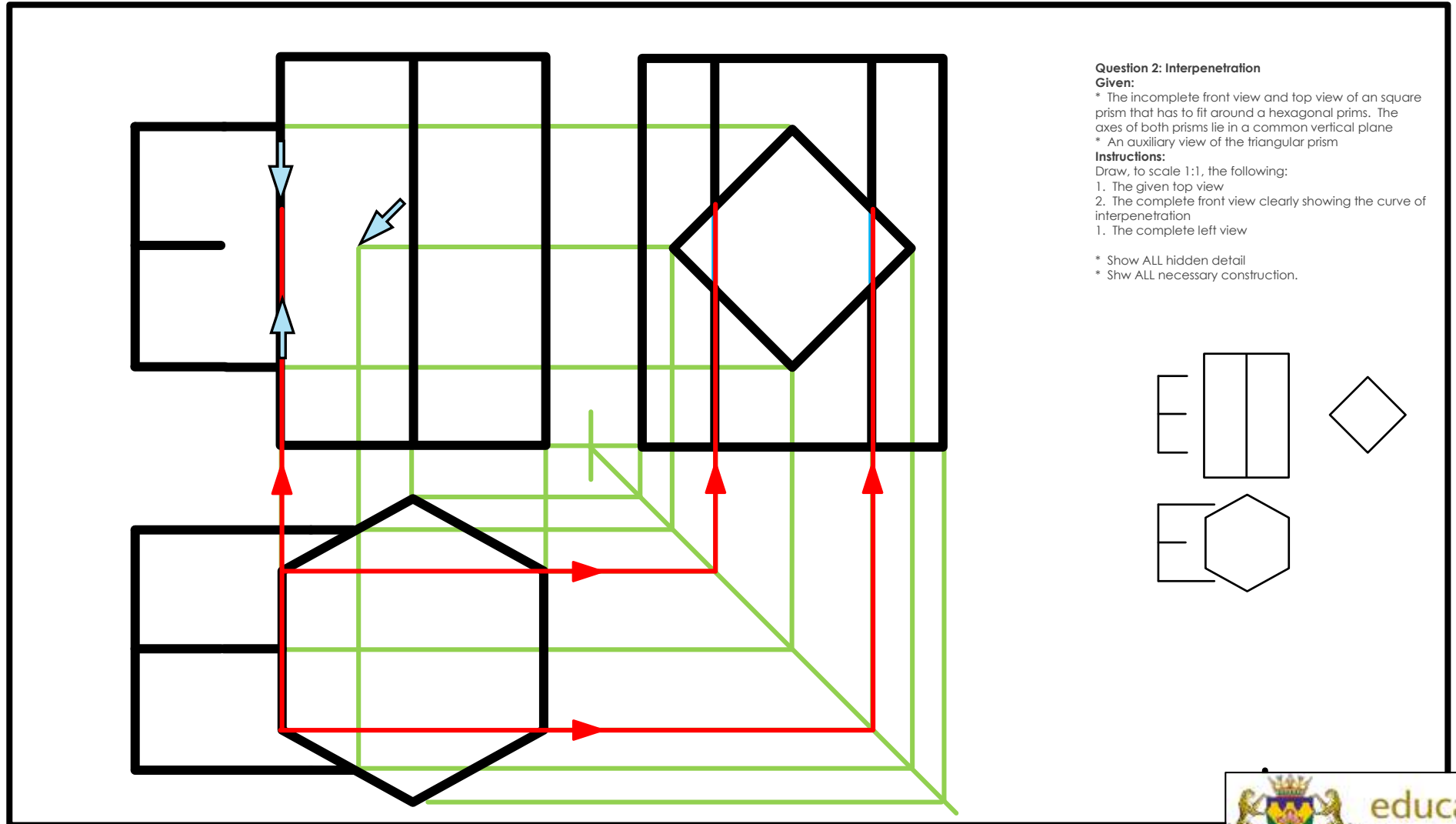
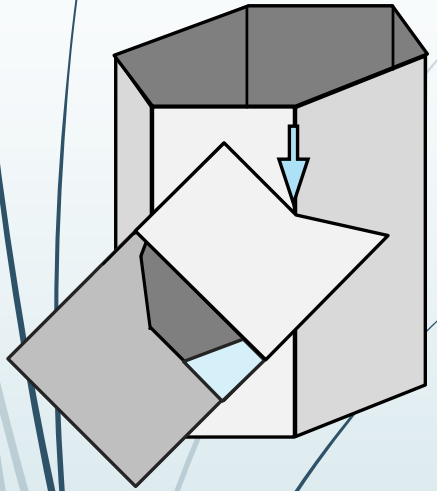


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Step 9



Question 2: Interpenetration

Given:

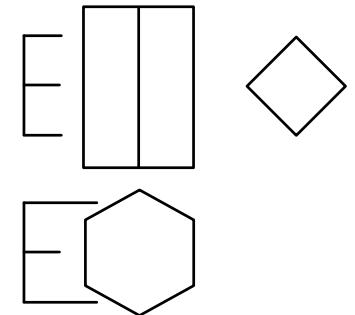
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

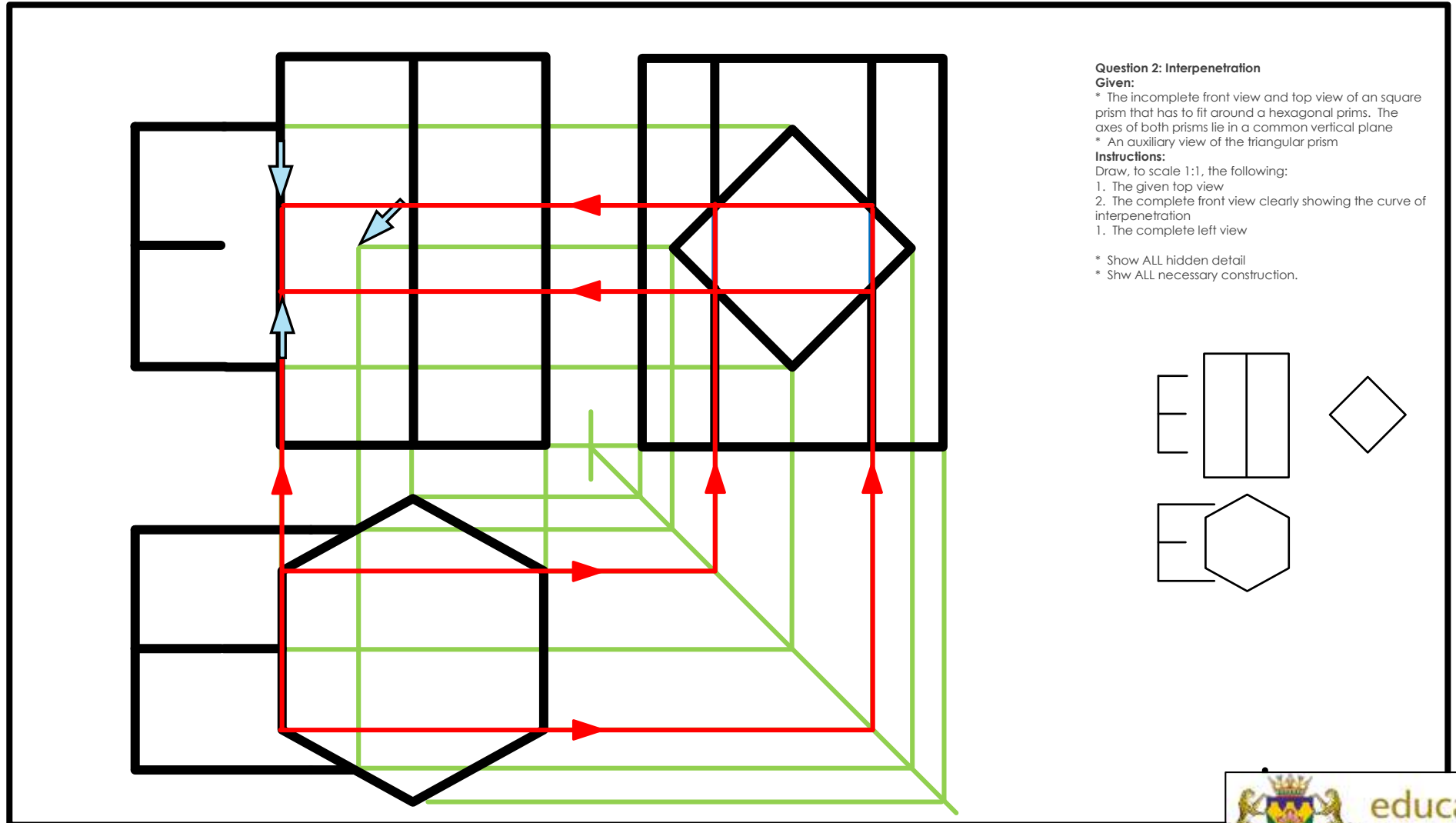
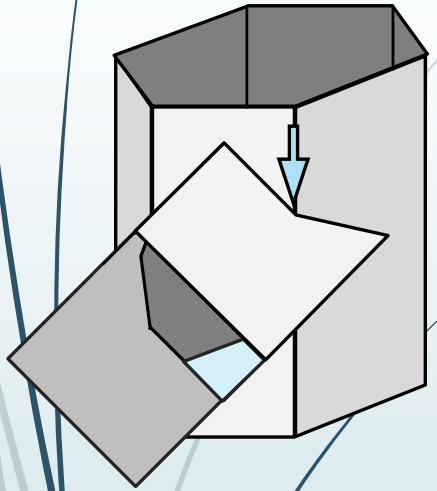


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Step 10



Question 2: Interpenetration

Given:

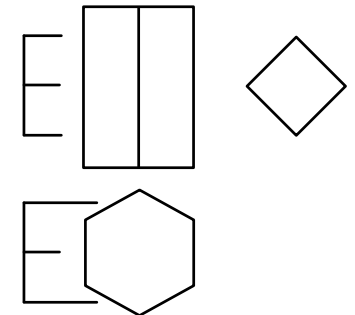
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

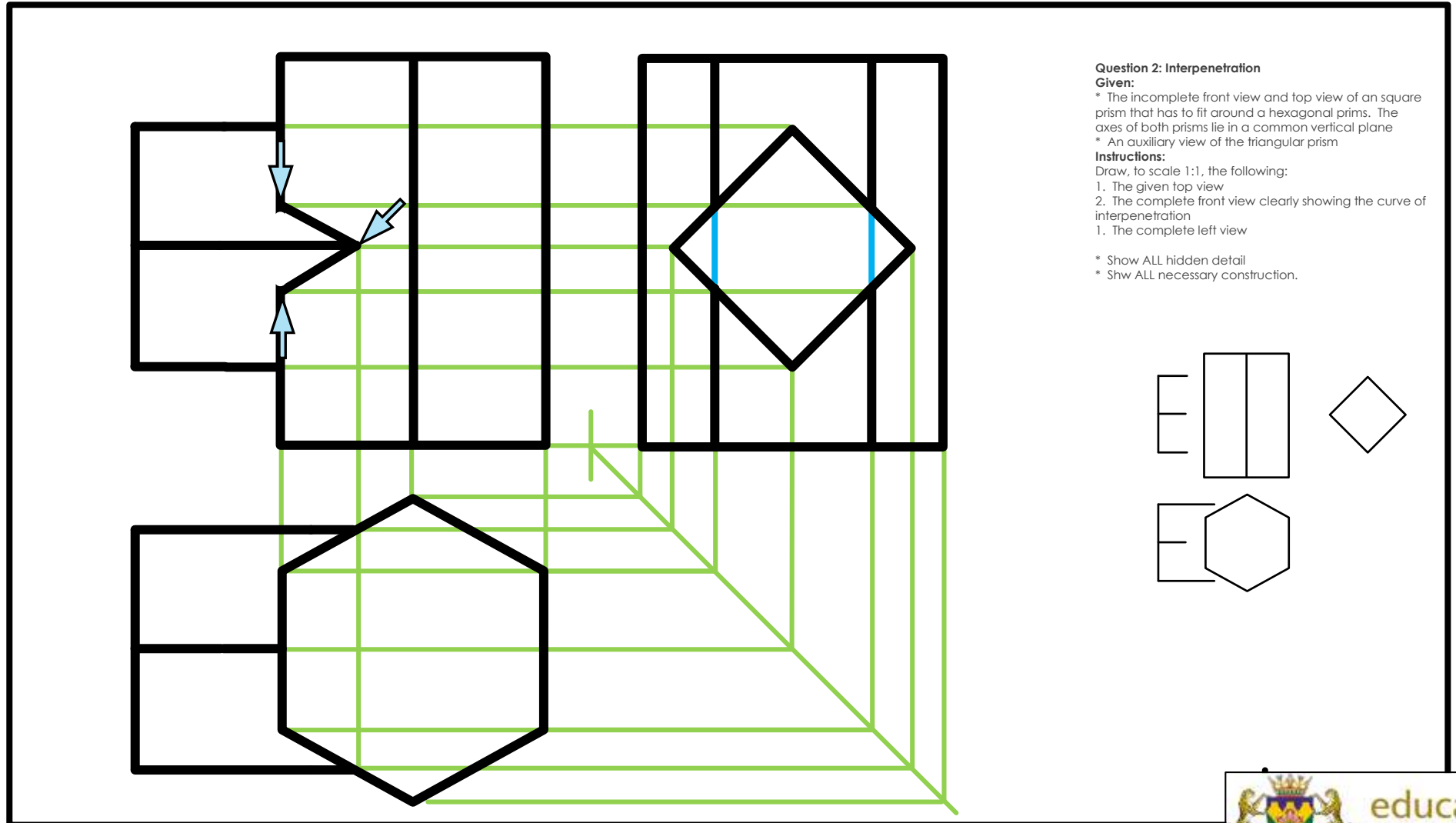
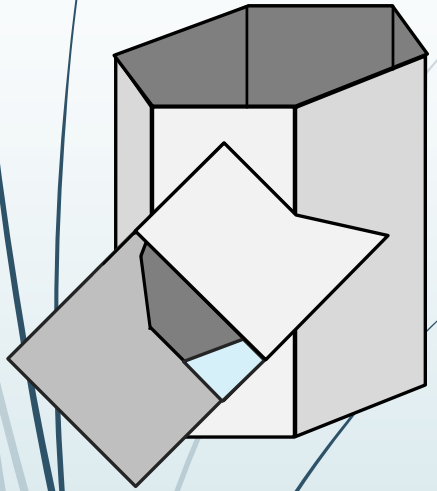


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Step 11



Question 2: Interpenetration

Given:

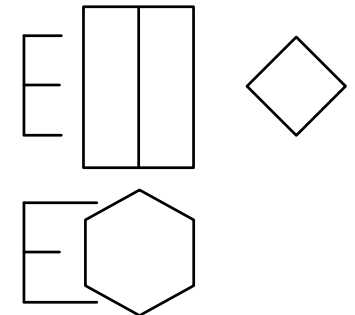
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

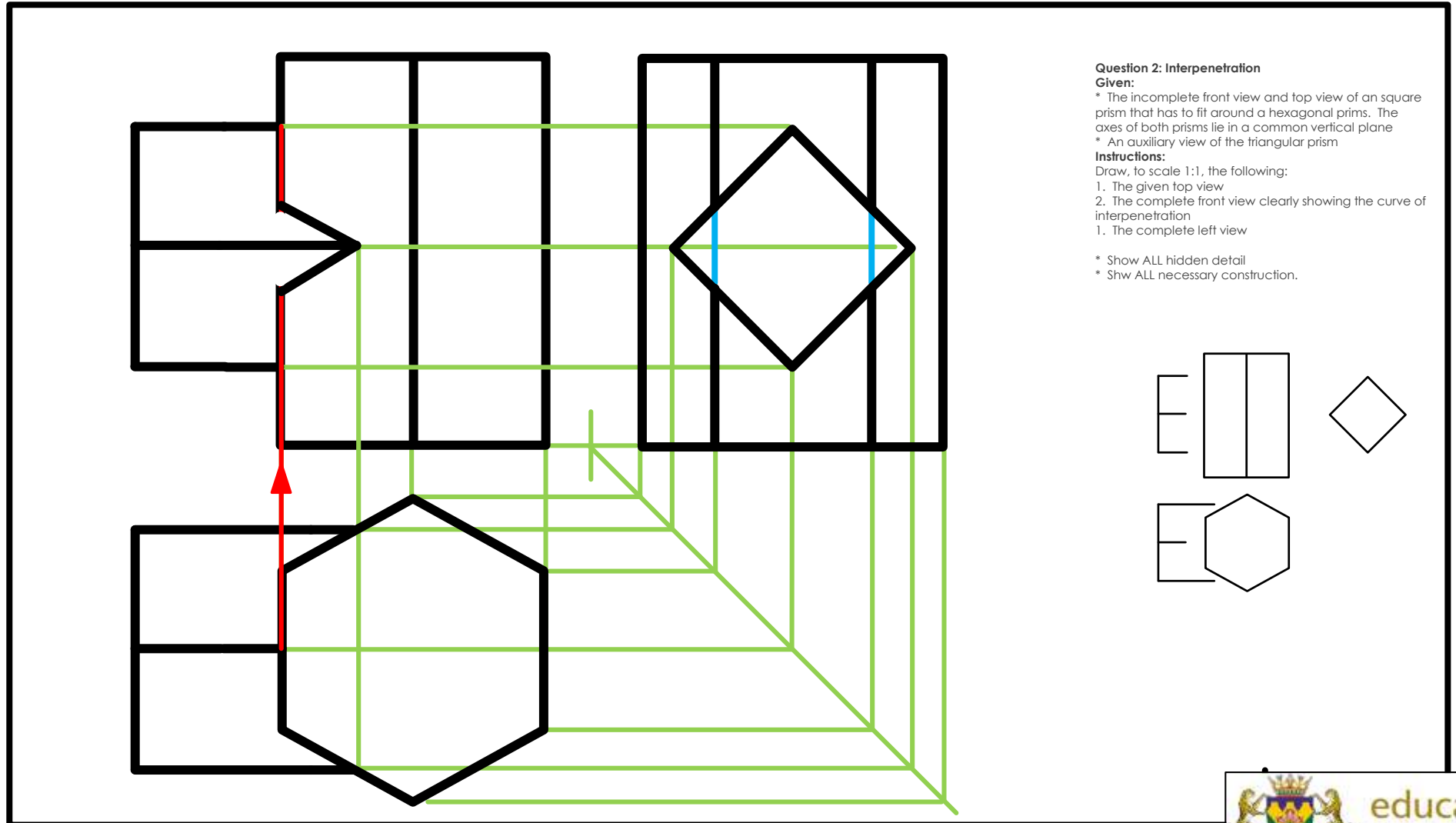
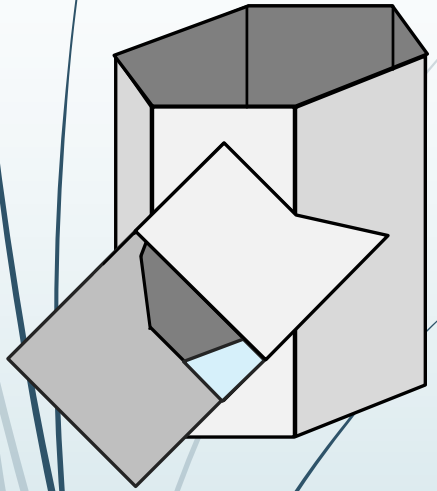


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Step 12



Question 2: Interpenetration

Given:

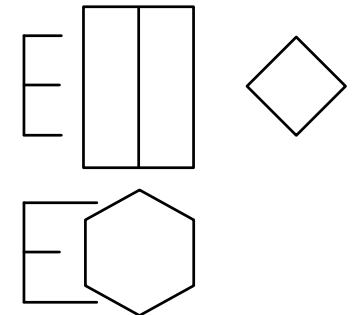
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

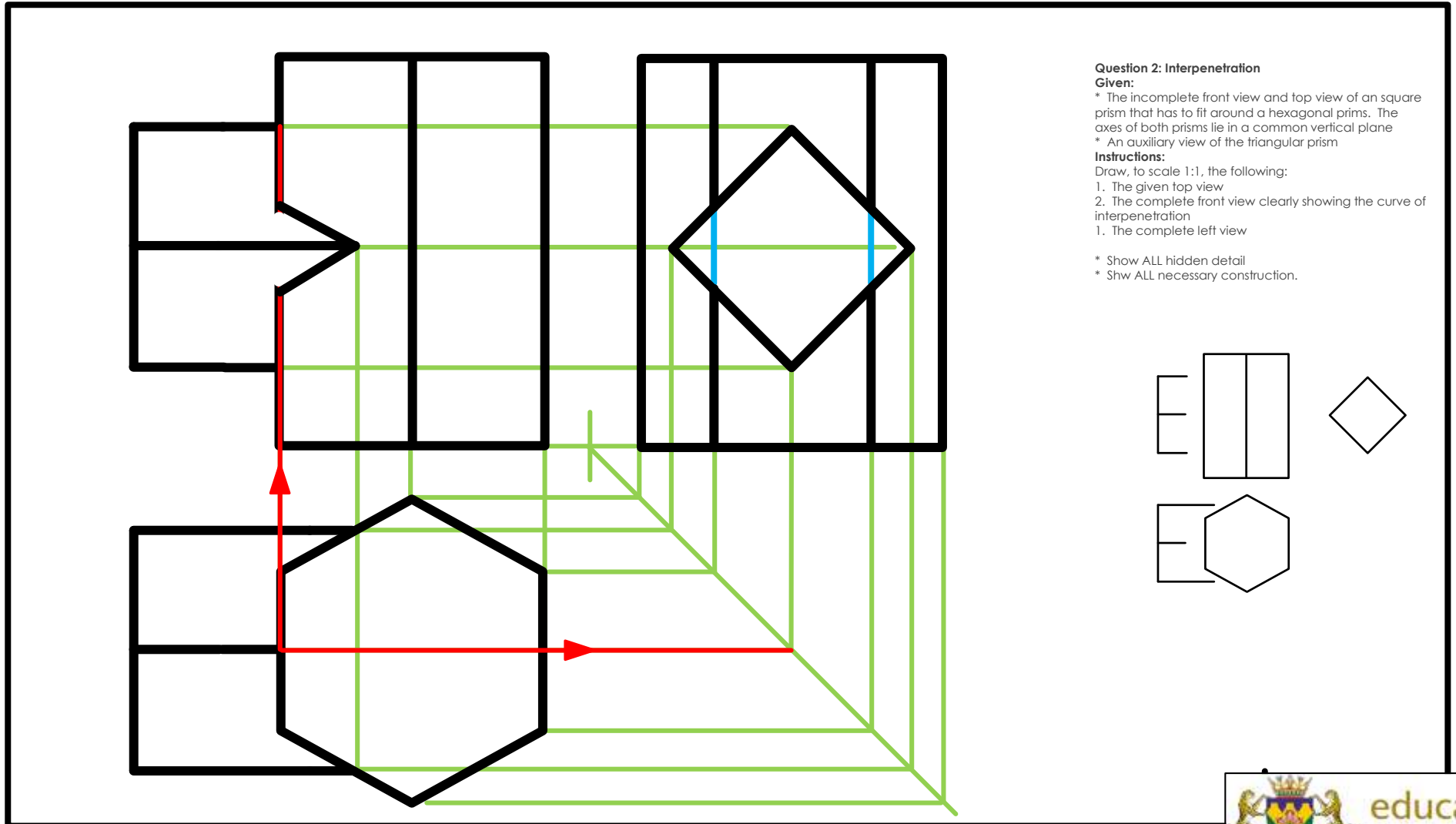
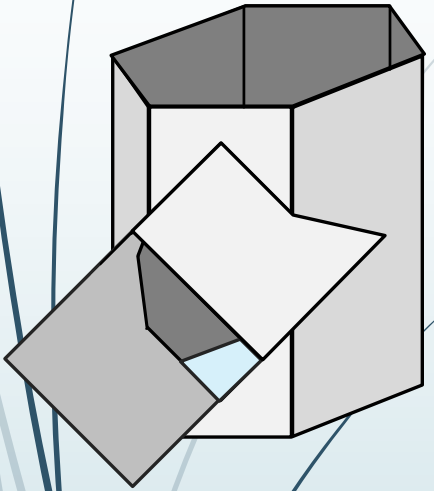


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Step 13



Question 2: Interpenetration

Given:

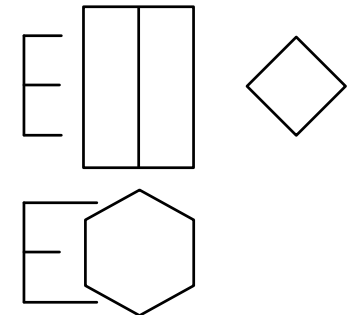
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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
- * Show ALL necessary construction.

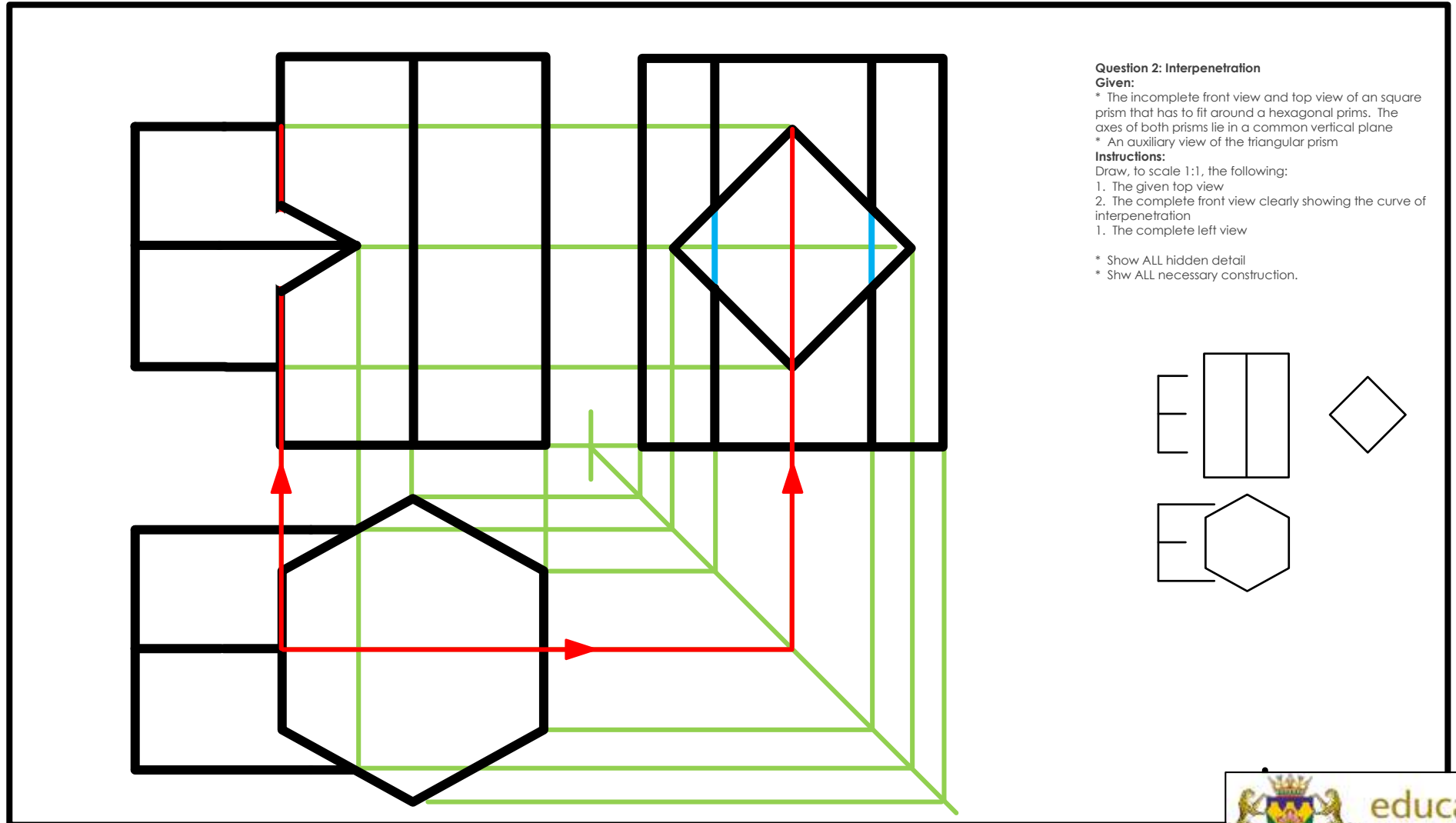
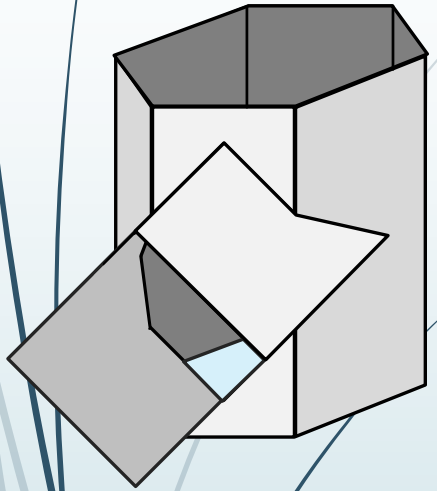


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Step 14



Question 2: Interpenetration

Given:

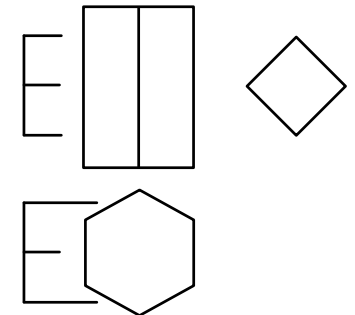
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

Instructions:

Draw, to scale 1:1, the following:

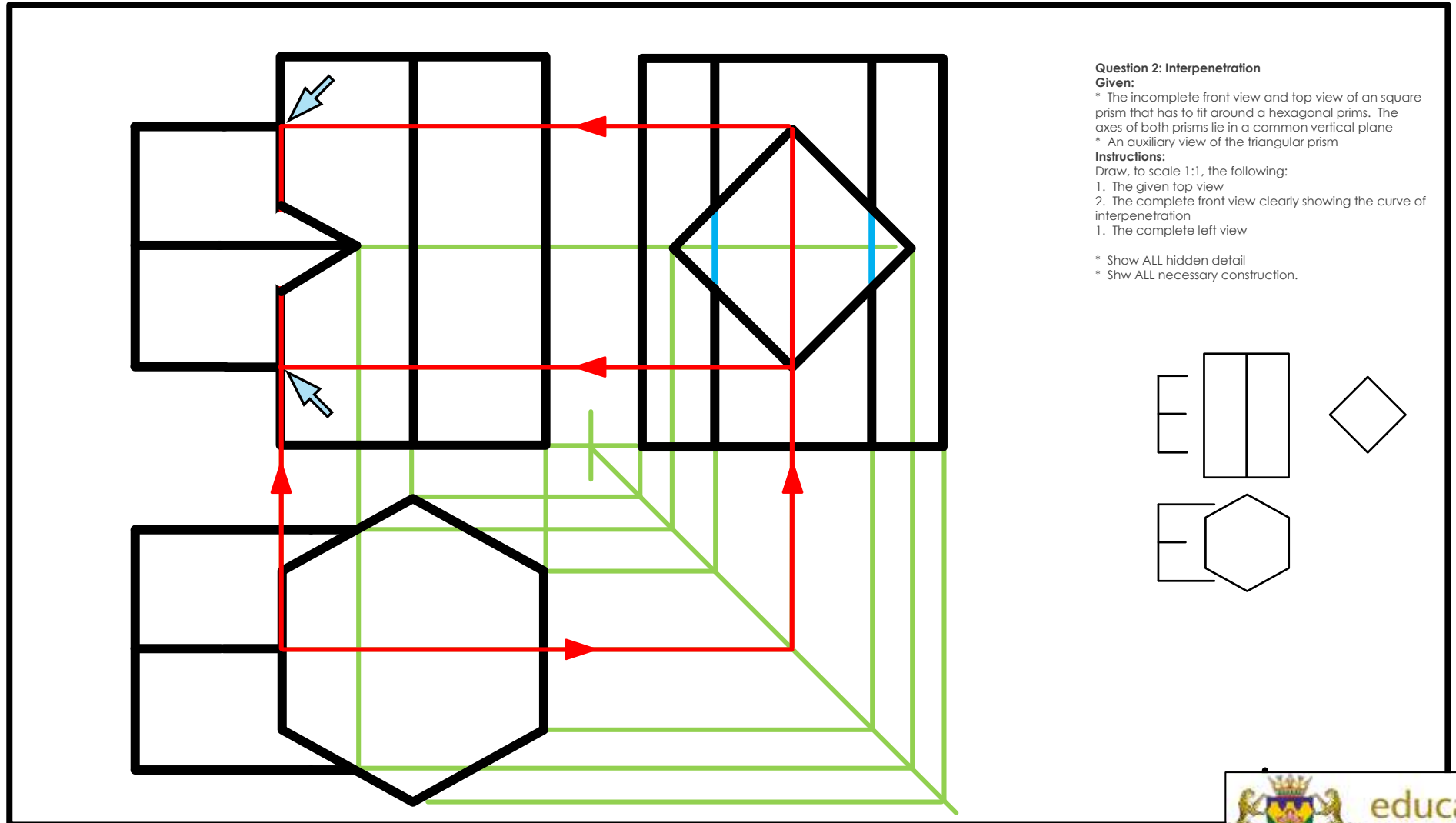
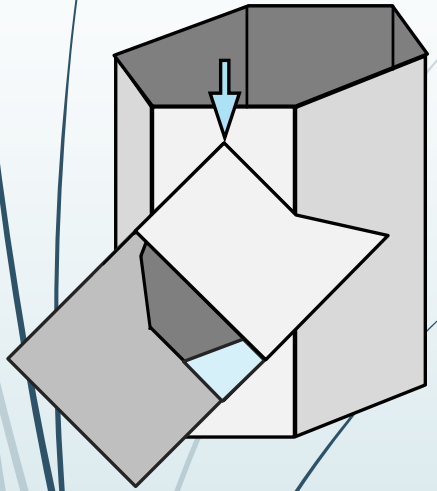
1. The given top view
 2. The complete front view clearly showing the curve of interpenetration
1. The complete left view

- * Show ALL hidden detail
- * Show ALL necessary construction.



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Step 15



Question 2: Interpenetration

Given:

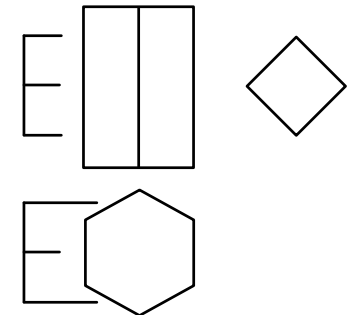
- * The incomplete front view and top view of a square prism that has to fit around a hexagonal prism. The axes of both prisms lie in a common vertical plane
- * An auxiliary view of the triangular prism

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

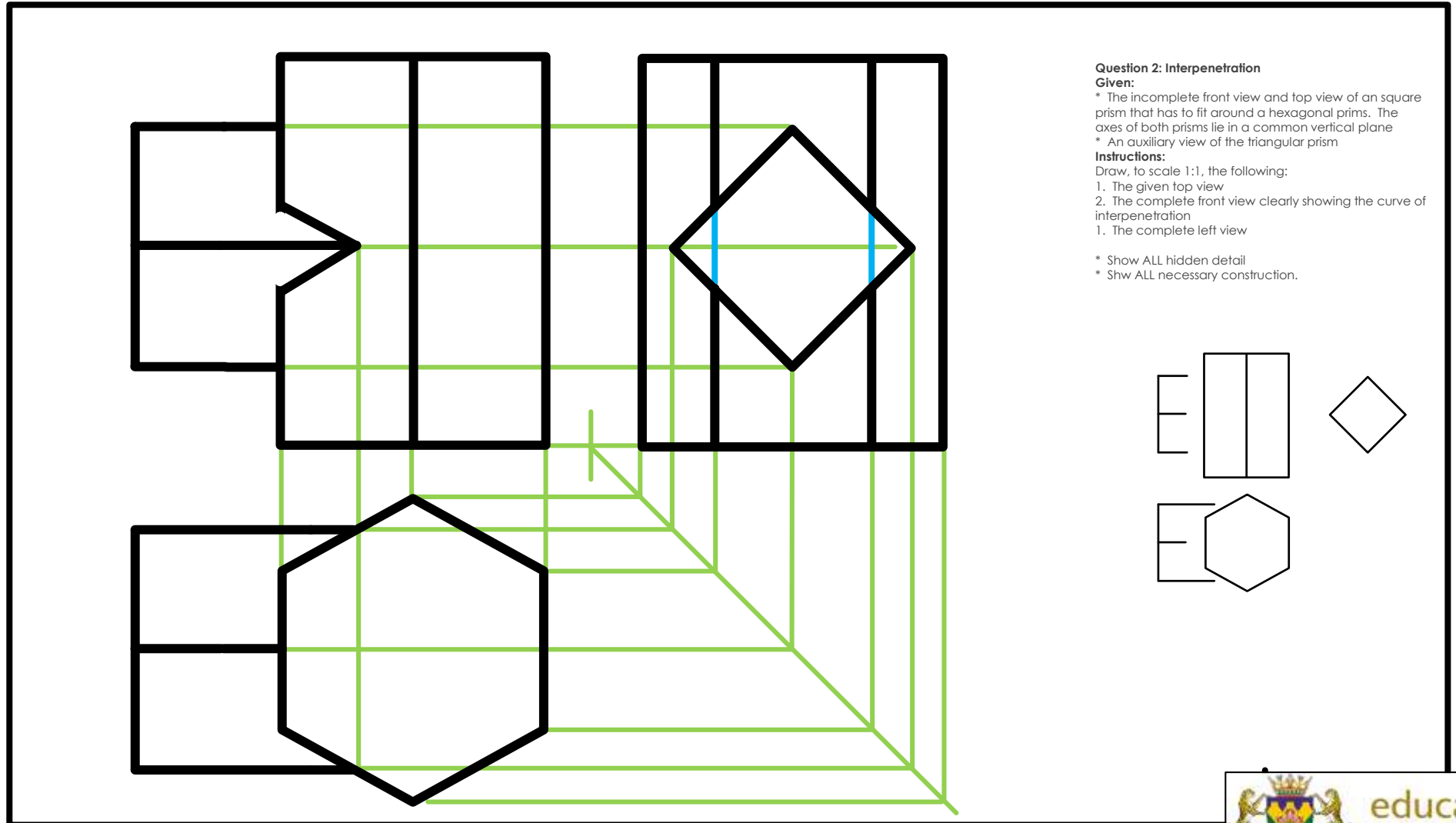
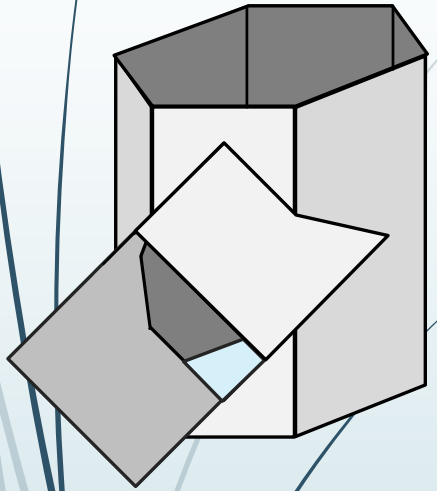
- * Show ALL hidden detail
- * Show ALL necessary construction.



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Question 2: Interpenetration

Given:

- * The incomplete front view and top view of a square prism that has to fit around a hexagonal 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
- * Show ALL necessary construction.

