

AMP(1)-Theo08 – Cross Product

1. Content

2. Learning objectives

2.1. Exam objectives

By the end of this lab you should be able to (pen and paper):

- Apply the cross product of vectors
- Be mindful of the cross product's anticommutativity
- Apply the cross product's geometric properties to determine surface normal (inwards or outwards) and area of its subtended triangle (or parallelogram)
- Apply the cross product's criterion for (anti)parallelism
- Given their condition is met, calculate the determinant of matrices of any square size
- Construct and calculate normal (unit) vectors to a given plane polygon in 3D

We advise you to **make your own summary of topics** which are new to you.

2.2. Supportive objectives

Specifically related to the above you should in GeoGebra Classic**5.0** be able to:

- Apply the cross product of vectors
- Apply the cross product to determine and visualize a surface normal in the View/Graphics

3. Theory scope (only the paragraphs matter)

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