

The theorem on page 32

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Theorem. *Evaluating $\omega \wedge \nu$ on the pair of vectors (V_1, V_2) gives the area of parallelogram spanned by V_1 and V_2 projected onto the plane containing the vectors $\langle w \rangle$ and $\langle v \rangle$, and multiplied by the area of the parallelogram spanned by $\langle w \rangle$ and $\langle v \rangle$.*

Proof.

$$\omega \wedge \nu(V_1, V_2) = \begin{vmatrix} \omega(V_1) & \nu(V_1) \\ \omega(V_2) & \nu(V_2) \end{vmatrix}.$$

□

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