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1 Angle between geometric elements.

Have the calculation for the angle between bivectors done elsewhere

$$\cos \theta = -\frac{\mathbf{A} \cdot \mathbf{B}}{|\mathbf{A}||\mathbf{B}|} \quad (1)$$

For $\theta \in [0, \pi]$.

The vector/vector result is well known and also works fine in \mathbb{R}^N

$$\cos \theta = \frac{\mathbf{u} \cdot \mathbf{v}}{|\mathbf{u}||\mathbf{v}|} \quad (2)$$

2 Calculation for a line and a plane.

Given a line with unit direction vector \mathbf{u} , and plane with unit direction bivector \mathbf{AA} , the component of that vector in the plane is:

$$-\mathbf{u} \cdot \mathbf{AA}.$$

So the direction cosine is available immediately

$$\cos \theta = \mathbf{u} \cdot \frac{-\mathbf{u} \cdot \mathbf{AA}}{|\mathbf{u} \cdot \mathbf{AA}|}$$

However, this can be reduced significantly. Start with the denominator

$$\begin{aligned} |\mathbf{u} \cdot \mathbf{AA}|^2 &= (\mathbf{u} \cdot \mathbf{AA})(\mathbf{AA} \cdot \mathbf{u}) \\ &= (\mathbf{u} \cdot \mathbf{A})^2. \end{aligned}$$

And in the numerator we have:

$$\begin{aligned}
\mathbf{u} \cdot (\mathbf{u} \cdot \mathbf{A}\mathbf{A}) &= \frac{1}{2}(\mathbf{u}(\mathbf{u} \cdot \mathbf{A}\mathbf{A}) + (\mathbf{u} \cdot \mathbf{A}\mathbf{A})\mathbf{u}) \\
&= \frac{1}{2}((\mathbf{u}\mathbf{u} \cdot \mathbf{A})\mathbf{A} + (\mathbf{u} \cdot \mathbf{A})\mathbf{A}\mathbf{u}) \\
&= \frac{1}{2}((\mathbf{A} \cdot \mathbf{u}\mathbf{u})\mathbf{A} - (\mathbf{A} \cdot \mathbf{u})\mathbf{A}\mathbf{u}) \\
&= (\mathbf{A} \cdot \mathbf{u})\frac{1}{2}(\mathbf{u}\mathbf{A} - \mathbf{A}\mathbf{u}) \\
&= -(\mathbf{A} \cdot \mathbf{u})^2.
\end{aligned}$$

Putting things back together

$$\cos \theta = \frac{(\mathbf{A} \cdot \mathbf{u})^2}{|\mathbf{u} \cdot \mathbf{A}|} = |\mathbf{u} \cdot \mathbf{A}|$$

The strictly positive value here is consistent with the fact that theta as calculated is in the $[0, \pi/2]$ range.

Restated for consistency with equations 2 and 1 in terms of not necessarily unit vector and bivectors \mathbf{u} and \mathbf{A} , we have

$$\cos \theta = \frac{|\mathbf{u} \cdot \mathbf{A}|}{|\mathbf{u}||\mathbf{A}|} \tag{3}$$