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|---|---|
| $\vec{a} \cdot \vec{b} = \vec{a} \cdot \vec{b} \cdot \cos \varphi$ | $\vec{a} \pm \vec{b} = (a_1 \pm b_1, a_2 \pm b_2, a_3 \pm b_3)$ |
| $ \vec{b} \cdot \cos \varphi = \text{proj}_{\vec{a}} \vec{b}$ | $M\vec{a} = (ma_1, ma_2, ma_3)$ |
| $\vec{a} \cdot \vec{b} = \vec{a} \cdot \text{proj}_{\vec{a}} \vec{b}$ | $S = (- - (\vec{a} \pm \vec{b} / 2))$ |
| $a^2 = b^2 + c^2 - 2bc \cdot \cos \alpha$ | $T = (a_1 + b_2 + c_3 / 3 \dots)$ |
| $ \vec{a} = \sqrt{\vec{a} \cdot \vec{a}}$ | $\vec{a} \cdot \vec{b} = a_1 b_1 + a_2 b_2 + a_3 b_3$ |
| $ \vec{a} = \sqrt{(a_1^2 + a_2^2 + a_3^2)}$ | $k_1 = 1/k_2$ |
| $\vec{a}_e = (1/ \vec{a}) \cdot \vec{a}$ | $a_1 - x = x'$ |
| $ \vec{AB} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2}$ | $a_2 - y = y'$ |
| $\cos \varphi = \vec{a} \cdot \vec{b} / (\vec{a} \cdot \vec{b})$ | $a_3 - z = z'$ |

| <i>II. kvadrant (91°-180°)</i> | <i>III. kvadrant (181°-270°)</i> | <i>IV. kvadrant (271°-360°)</i> |
|---|---|---|
| $\sin(180^\circ - \alpha) = \sin \alpha$ | $\sin(180^\circ + \alpha) = -\sin \alpha$ | $\sin(360^\circ - \alpha) = -\sin \alpha$ |
| $\cos(180^\circ - \alpha) = -\cos \alpha$ | $\cos(180^\circ + \alpha) = -\cos \alpha$ | $\cos(360^\circ - \alpha) = \cos \alpha$ |
| $\tan(180^\circ - \alpha) = -\tan \alpha$ | $\tan(180^\circ + \alpha) = \tan \alpha$ | $\tan(360^\circ - \alpha) = -\tan \alpha$ |
| $\cot(180^\circ - \alpha) = -\cot \alpha$ | $\cot(180^\circ + \alpha) = \cot \alpha$ | $\cot(360^\circ - \alpha) = -\cot \alpha$ |

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|---|---|---|
| $\tan \alpha = \sin \alpha / \cos \alpha$ | $\cot \alpha = \cos \alpha / \sin \alpha$ | $\tan \alpha \cdot \cot \alpha = 1$ |
| $\sin^2 \alpha + \cos^2 \alpha = 1$ | $1 + \cot^2 \alpha = 1 / \sin^2 \alpha$ | $1 + \tan^2 \alpha = 1 / \cos^2 \alpha$ |