



TRIGONOMETRY

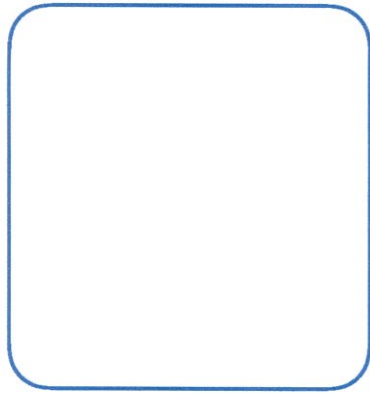
# DOUBLE (HALF) ANGLE FORMULAE

1	2	3	4	5
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Prove the double angle formulae, and learn them in both directions, with all sorts of different angles.

$$\sin 6A \cos 6A$$

$$=$$



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$$\tan \left(\frac{1}{2}A\right)$$

$$=$$



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$$\tan (6A)$$

$$=$$

$$\sin(2A) = \sin(A+A)$$

$$=$$

$$=$$

$$\tan(2A) = \frac{\tan A + \tan A}{1 - \tan A \tan A}$$

$$=$$

$$\cos(2A) = \cos A \cos A - \sin A \sin A$$

$$=$$

$$\cos(2A) = (1 - \sin^2 A) - \sin^2 A$$

$$=$$

$$\cos(2A) = \cos^2 A - (1 - \cos^2 A)$$

$$=$$

$$=$$

