

# Math 13 Test 5 “Brain Drain” Sheet

Pythagorean Identities:

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Half Angle Identities:

$$\sin(\alpha/2) = \underline{\hspace{2cm}}$$

$$\cos(\alpha/2) = \underline{\hspace{2cm}}$$

$$\tan(\alpha/2) = \frac{\sin a}{1 + \cos a} = \frac{1 - \cos a}{\sin a}$$

Sum and Difference Identities:

$$\sin(\alpha+\beta) = \underline{\hspace{2cm}}$$

$$\sin(\alpha-\beta) = \underline{\hspace{2cm}}$$

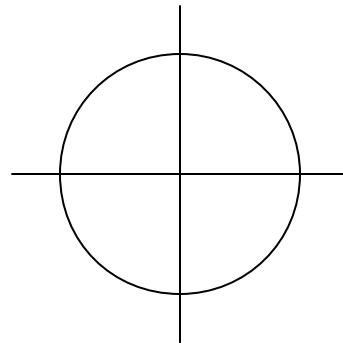
$$\cos(\alpha+\beta) = \underline{\hspace{2cm}}$$

$$\cos(\alpha-\beta) = \underline{\hspace{2cm}}$$

$$\tan(\alpha+\beta) = \underline{\hspace{2cm}}$$

$$\tan(\alpha-\beta) = \underline{\hspace{2cm}}$$

Answers to Inverse Trig problems:



Double Angle Identities:

$$\sin(2\alpha) = \underline{\hspace{2cm}}$$

$$\cos(2\alpha) = \underline{\hspace{2cm}}$$

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$$\tan(2\alpha) = \underline{\hspace{2cm}}$$

