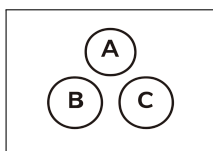


33 Formulas and Identities

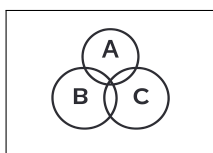
Double Angle Formulas

C

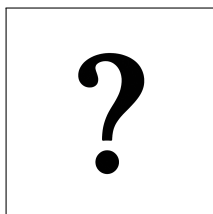


$$\theta = 30^\circ$$

$$\tan(60^\circ) = 2(1/\sqrt{3})/(1 - (1/\sqrt{3})^2) = \sqrt{3}$$



$$\tan(60^\circ) = 2\tan(\theta)/(1 - \tan^2(\theta))$$



$$\theta = 45^\circ$$

$$\tan(2\theta) = ?$$

33 Formulas and Identities

Double Angle Formulas

C



$$\theta = 45^\circ$$

$$\tan(90^\circ) = 2\tan(\theta)/(1 - \tan^2(\theta))$$

$$\tan(90^\circ) = 2/(1 - 1) = \textit{undefined}$$