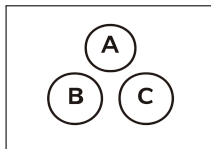


33 Formulas and Identities

Double Angle Formulas

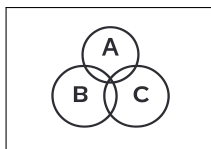
A



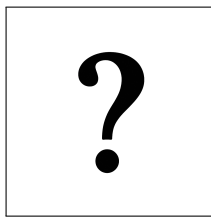
$$\theta = 30^\circ$$

$$\sin(60^\circ) = 2 \times 1/2 \times \sqrt{3}/2$$

$$\sin(60^\circ) = \sqrt{3}/2$$



$$\sin(2\theta) = 2\sin(\theta)\cos(\theta)$$



$$\theta = 45^\circ$$

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

33 Formulas and Identities

Double Angle Formulas

A



$$\theta = 45^\circ$$

$$\sin(2\theta) = 2 \sin(\theta) \cos(\theta)$$

$$\sin(90^\circ) = 2 \times \sqrt{2}/2 \times \sqrt{2}/2$$

$$\sin(90^\circ) = 2 \times 1/2 = 1$$