

Double & Half-Angle Identities

1) If $\sin \theta = -\frac{\sqrt{3}}{2}$ and $\pi \leq \theta \leq \frac{3\pi}{2}$, find $\sin \frac{\theta}{2}$.

2) If $\tan \theta = \frac{3}{4}$

3) If $\tan \theta = 2$

4) If $\cos \theta = \frac{12}{13}$ and θ lies in quadrant IV, find $\sin 2\theta$.

PREVIEW

Gain complete access to the largest
collection of worksheets in all subjects!

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

Double & Half-Angle Identities

1) If $\sin \theta = -\frac{\sqrt{3}}{2}$ and $\pi \leq \theta \leq \frac{3\pi}{2}$, find $\sin \frac{\theta}{2}$.

$$\frac{\sqrt{3}}{2}$$

2) If $\tan \theta = \frac{3}{4}$

PREVIEW

Gain complete access to the largest
collection of worksheets in all subjects!

Members, please
log in to
download this
worksheet.

Not a member?
Please sign up to
gain complete
access.

www.mathworksheets4kids.com

3) If $\tan \theta = 2$

4) If $\cos \theta = \frac{12}{13}$ and θ lies in quadrant IV, find $\sin 2\theta$.

$$-\frac{120}{169}$$