

10.2 Half Angles Notes

EQ: How do the half angle properties simplify expressions and solve equations?

How do I simplify expressions with half angle properties?

1. Simplify $\sqrt{\frac{1}{2}(1 - \cos 4A)}$

How do I find exact values using half angles?

2. If $\csc x = \frac{13}{5}$ and $\frac{\pi}{2} < x < \pi$, find $\sin \frac{1}{2}x$, $\cos \frac{1}{2}x$, and $\tan \frac{1}{2}x$

3. If $\cos x = -\frac{1}{9}$ and $180^\circ < \theta < 270^\circ$, find $\cos\left(\frac{x}{2}\right)$

Summary