

Name : _____

Solving Trigonometric Equations

T1S1

Solve each trigonometric equation.

1) $\cos \frac{\theta}{2} = 0$

2) $\sin^2 11\theta = 0$

3) $\tan 3\theta = 0$

4) $\cos 5\theta = 0$

5) $\sin 2\theta = 0$

6) $\tan \frac{9\theta}{4} = 0$

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Answer key

Solving Trigonometric Equations

T1S1

Solve each trigonometric equation.

1) $\cos \frac{\theta}{2} = 0$

$$(2n + 1)\pi ; n \in \mathbb{Z}$$

2) $\sin^2 11\theta = 0$

$$\frac{n\pi}{11} ; n \in \mathbb{Z}$$

3) $\tan 3\theta = 0$

$$\frac{n\pi}{3} ; n \in \mathbb{Z}$$

4) $\cos 5\theta = 0$

$$(2n + 1)\frac{\pi}{10} ; n \in \mathbb{Z}$$

5) $\sin 2\theta = 0$

$$\frac{n\pi}{2} ; n \in \mathbb{Z}$$

6) $\tan \frac{9\theta}{4} = 0$

$$\frac{4n\pi}{9} ; n \in \mathbb{Z}$$