



mobius

Trigonometry Identities - Power Reducing to Identity (Degrees)



 $tan^2(45^\circ)$

Complete the power reducing identity for this expression

$$\stackrel{\mathsf{A}}{=} rac{1-\mathsf{cos}(2\cdot 45^\circ)}{1+\mathsf{cos}(2\cdot 45^\circ)}$$

 $1 + \cos(45^{\circ})$

2

 $sin^2(135^\circ)$

Complete the power reducing identity for this expression

$$\stackrel{\mathsf{A}}{=} \frac{1 - \cos(2 \cdot 135^{\circ})}{2}$$

$$\stackrel{\mathsf{B}}{=} \frac{1 - \cos(2 \cdot 135^{\circ})}{2}$$

 $\sin^2(30^\circ)$

Complete the power reducing identity for this expression

$$\stackrel{\mathsf{A}}{=} rac{1 + \cos(2 \cdot 30^\circ)}{1 - \cos(30^\circ)} \ = rac{1 - \cos(2 \cdot 30^\circ)}{2}$$

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 $\cos^2(30^\circ)_{\frac{A}{2}\frac{1+\cos(2\cdot30^\circ)}{2}}$

Complete the power reducing identity for this expression

$$egin{aligned} &=rac{1+\cos(2\cdot 30^\circ)}{2} \ &=rac{1+\cos(2\cdot 30^\circ)}{1-\cos(30^\circ)} \end{aligned}$$

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 $\cos^2(300^\circ)_{\frac{A}{1-\cos(300^\circ)}}$

Complete the power reducing identity for this expression

$$= \frac{1 + \cos(2 \cdot 300^{\circ})}{1 - \cos(300^{\circ})}$$

$$= \frac{1 + \cos(2 \cdot 300^{\circ})}{2}$$

Complete the power reducing identity for this expression

$$egin{aligned} {\sf A} = rac{2}{1+\cos(60^\circ)} \ &= rac{1-\cos(2\cdot 60^\circ)}{1+\cos(2\cdot 60^\circ)} \end{aligned}$$

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 $tan^2(315^\circ)$

Complete the power reducing identity for this expression

$$egin{aligned} &= rac{2}{1+\cos(315^\circ)} \ &= rac{1-\cos(2\cdot 315^\circ)}{1+\cos(2\cdot 315^\circ)} \end{aligned}$$

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6

Complete the power reducing identity for this expression

$$\cos^2(225^\circ) = \frac{1 + \cos(2 \cdot 225^\circ)}{1 - \cos(225^\circ)} = \frac{1 + \cos(2 \cdot 225^\circ)}{2}$$