# **Precalculus**
## **Trigonometric functions computable with algebraic numbers using special angles**

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## Example

Find the exact value of the trigonometric function using radicals.

$\cos(105°) = \cos(45° + 60°)$      we know the trig f-ns of $45°$ and $60°$

$\quad\quad = \cos(45°)\cos(60°) - \sin(45°)\sin(60°)$    Angle sum f-la

$\quad\quad = \dfrac{\sqrt{2}}{2} \cdot \dfrac{1}{2} - \dfrac{\sqrt{2}}{2} \cdot \dfrac{\sqrt{3}}{2}$

$\quad\quad = \dfrac{\sqrt{2} - \sqrt{6}}{4}.$