$$\sin 195° = \sin(240 - 45)$$
$$\qquad\qquad\quad \underset{\alpha}{\quad} \underset{\beta}{\quad}$$

$$= \sin 240 \cos 45 - \cos 240 \sin 45$$

$$= \left(-\frac{\sqrt{3}}{2}\right)\left(\frac{\sqrt{2}}{2}\right) - \left(-\frac{1}{2}\right)\left(\frac{\sqrt{2}}{2}\right)$$

$$= \frac{-\sqrt{6} + \sqrt{2}}{4}$$

$$\cos 285° = \cos(240 + 45)$$

$$= \cos 240 \cos 45 - \sin 240 \sin 45$$

$$= \left(-\frac{1}{2}\right)\left(\frac{\sqrt{2}}{2}\right) - \left(-\frac{\sqrt{3}}{2}\right)\left(\frac{\sqrt{2}}{2}\right)$$

$$= \frac{-\sqrt{2} + \sqrt{6}}{4}$$

$$\tan 195° = \tan(150 + 45)$$

$$= \frac{\tan 150 + \tan 45}{1 - \tan 150 \tan 45}$$

$$= \frac{-\frac{\sqrt{3}}{3} + \frac{3}{3}}{\frac{3}{3} - \left(-\frac{\sqrt{3}}{3}\right)(1)} = \frac{\frac{-\sqrt{3}+3}{3}}{\frac{3+\sqrt{3}}{3}} = \frac{-\sqrt{3}+3}{3} \cdot \frac{3}{3+\sqrt{3}}$$

$$= \frac{-\sqrt{3}+3}{3+\sqrt{3}} \left(\frac{3-\sqrt{3}}{3-\sqrt{3}}\right) = \frac{-3\sqrt{3}+3+9-3\sqrt{3}}{9-3}$$

$$= \frac{12 - 6\sqrt{3}}{6} = \boxed{2 - \sqrt{3}}$$

$$\csc 195°$$

$$\sin 195° = -\frac{\sqrt{6}+\sqrt{2}}{4}$$

$$\csc 195° = \frac{4}{-\sqrt{6}+\sqrt{2}} \left(\frac{-\sqrt{6}-\sqrt{2}}{-\sqrt{6}-\sqrt{2}}\right) = \frac{-4\sqrt{6}-4\sqrt{2}}{6-2}$$

$$= \frac{-4\sqrt{6}-4\sqrt{2}}{4}$$

$$= \boxed{-\sqrt{6} - \sqrt{2}}$$

$$\csc\left(\frac{3\pi}{2} + A\right) = -\sec A$$

$$\frac{1}{\sin\left(\frac{3\pi}{2} + A\right)} =$$

$$\frac{1}{\sin\frac{3\pi}{2}\cos A + \cos\frac{3\pi}{2}\sin A} =$$

$$\frac{1}{(-1)\cos A + 0\sin A} =$$

$$\cdot -\frac{1}{\cos A} =$$

$$-\sec A = -\sec A$$

$$\tan\frac{5\pi}{12} = \tan\left(\frac{2\pi}{12} + \frac{3\pi}{12}\right)$$

$$= \tan\left(\frac{\pi}{6} + \frac{\pi}{4}\right)$$

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14, 15, 17, 18, 19, 21, 23; 24

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