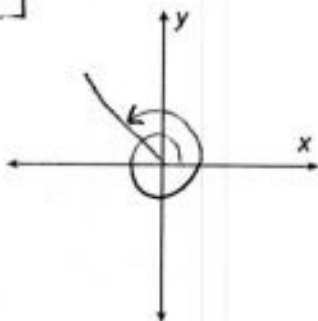


Draw the indicated angle of rotation in standard position.

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• Ext

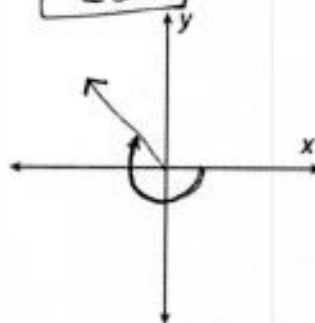
1. A positive angle coterminal to 130°
 $+360^\circ$

$$\boxed{490^\circ}$$



2. A negative angle coterminal to 130°

$$\boxed{-230^\circ}$$



Convert each measure from degrees to radians or from radians to degrees.

7. $70^\circ \cdot \frac{\pi}{180} = \boxed{\frac{7\pi}{18}}$

8. $-270^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{3\pi}{2}}$

9. $-945^\circ \cdot \frac{\pi}{180} = \boxed{\frac{21\pi}{4}}$

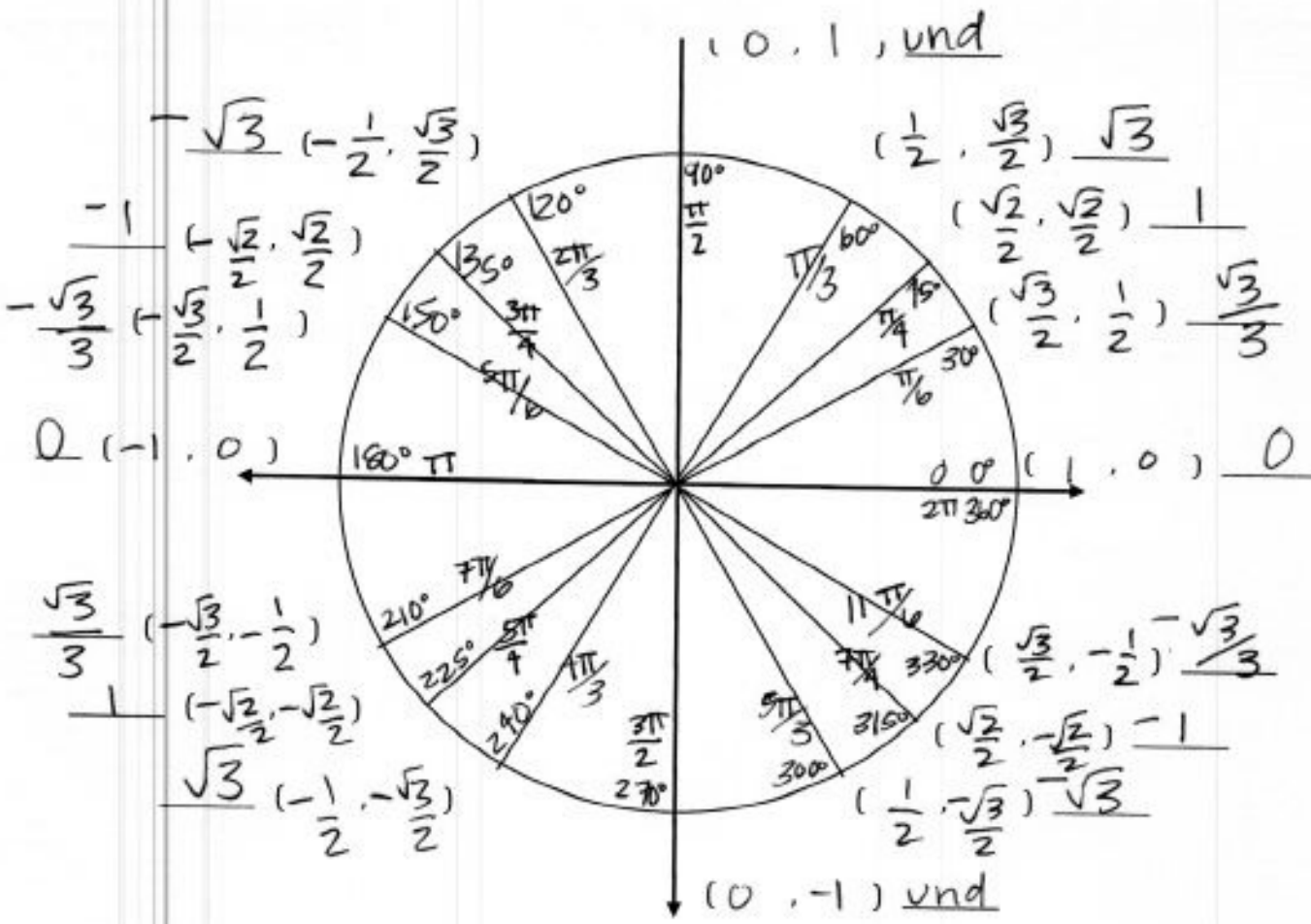
10. $2160^\circ \cdot \frac{\pi}{180} = \boxed{12\pi}$

11. $\frac{33\pi}{18} \cdot \frac{180}{\pi} = \boxed{330^\circ}$

12. $\frac{11\pi}{4} \cdot \frac{180}{\pi} = \boxed{495^\circ}$

13. $\frac{5\pi}{3} \cdot \frac{180}{\pi} = \boxed{-300^\circ}$

14. $-\frac{7\pi}{2} \cdot \frac{180}{\pi} = \boxed{-630^\circ}$



Evaluate without a calculator:

1. $\sin\left(\frac{\pi}{6}\right) = \frac{1}{2}$ 2. $\sec\left(\frac{\pi}{4}\right) = \sqrt{2}$ 3. $\tan\left(\frac{\pi}{3}\right) = \sqrt{3}$ 4. $\csc\left(\frac{4\pi}{3}\right) = -\frac{2\sqrt{3}}{3}$ 5. $\cos\left(\frac{7\pi}{4}\right) = -\frac{\sqrt{2}}{2}$

Find the angle that satisfies the following equations:

6. $\cos\theta = \frac{1}{2}; 0 \leq \theta \leq \pi$

$\frac{\pi}{3}$ or 60°

7. $\tan\theta = \sqrt{3}; -\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$

$\frac{\pi}{3}$ or 60°

8. $\sin\theta = -\frac{\sqrt{2}}{2}; -\frac{\pi}{2} \leq \theta \leq \frac{\pi}{2}$

$\left(\frac{7\pi}{4}\right) \rightarrow \frac{-\pi}{4}$ or -45°
 (315°)

Choose a point on the terminal side of θ .

9. $\theta = \frac{2\pi}{3}$

a. $(-1, 1)$ b. $\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$

c. $\left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$

Evaluate without a calculator:

10. $\sin\frac{\pi}{3} = \frac{\sqrt{3}}{2}$

11. $\cos\frac{3\pi}{4} = \frac{-\sqrt{2}}{2}$

12. $\csc\frac{-15\pi}{4} = \sqrt{2}$
 $\csc\frac{\pi}{4} = \sqrt{2}$
 $\frac{-15\pi}{4} + \frac{8\pi}{4} = \frac{-7\pi}{4} + \frac{8\pi}{4} = \frac{\pi}{4}$

13. $\tan\left(\frac{\pi}{3}\right) = \sqrt{3}$

14. $\sec\frac{5\pi}{6} = -\sqrt{2}$