HA2T Unit Circle Circuit #3 Name Key

Directions: Begin in cell #1. To advance in the circuit, find your answer and write 2 in the blank. Continue in this manner until you complete the circuit.

1. Answer: $\frac{\sqrt{6}}{2}$ $\sin 150°$ $\frac{1}{2}$	Answer: $-\frac{\sqrt{3}}{2}$ # 9 $\cot\frac{3\pi}{2}$ 0
Answer: $-\frac{1}{2}$ # 7 $\sin\frac{\pi}{4}$ $\frac{\sqrt{2}}{2}$	Answer: $\frac{\sqrt{3}}{3}$ # 16 $\sec\frac{7\pi}{4}$ $\frac{2}{\sqrt{2}} = \sqrt{2}$
Answer: $-\frac{\sqrt{3}}{3}$ # 12 $\sin\frac{3\pi}{2}$ -1	Answer: $\sqrt{3}$ # 4 $\csc\frac{\pi}{2}$ 1
Answer: $\frac{2\sqrt{3}}{3}$ # 18 $\tan 225°\sec 225°$ $1 \cdot \frac{-2}{\sqrt{2}} = -\sqrt{2}$	Answer: $-\frac{2\sqrt{3}}{3}$ # 14 $\sec\frac{5\pi}{3}$ 2
Answer: 0 # 10 $\cos 330°$ $\frac{\sqrt{3}}{2}$	Answer: $-3\sqrt{3}$ # 20 $\cos 30°\sin 135° - \sin 45°\cos 210°$ $\frac{\sqrt{3}}{2}\cdot\frac{\sqrt{2}}{2} - \frac{\sqrt{2}}{2}\cdot\frac{-\sqrt{3}}{2} = \frac{\sqrt{6}+\sqrt{6}}{4} = \frac{\sqrt{6}}{2}$
Answer: $\frac{1}{2}$ # 2 $\cot 180°$ undefined	Answer: $\frac{\sqrt{2}}{2}$ # 8 $\sin\left(-\frac{2\pi}{3}\right)$ $\frac{-\sqrt{3}}{2}$
Answer: $-\frac{\sqrt{2}}{2}$ # 6 $\cos 240°$ $-\frac{1}{2}$	Answer: -1 # 13 $\csc 240°$ $\frac{-2}{\sqrt{3}} = \frac{-2\sqrt{3}}{3}$
Answer: ~~+2~~ # 15 $\tan\frac{7\pi}{6}$ $\frac{\sqrt{3}}{3}$	Answer: $\frac{\sqrt{3}}{2}$ # 11 $\tan\frac{5\pi}{6}$ $\frac{-\frac{1}{2}}{\frac{-\sqrt{3}}{2}} = -\frac{\sqrt{3}}{3}$
Answer: $\sqrt{2}$ # 17 $\sec\left(-\frac{\pi}{6}\right)$ $\frac{2\sqrt{3}}{3}$	Answer: 1 # 5 $\cos 225°$ $-\frac{\sqrt{2}}{2}$
Answer: undefined # 3 $\cot\frac{\pi}{6}$ $\frac{\frac{\sqrt{3}}{2}}{\frac{1}{2}} = \frac{\sqrt{3}}{2}\cdot\frac{2}{1} = \sqrt{3}$	Answer: $-\sqrt{2}$ # 19 $12\sin 150°\cos 150°$ $12\cdot\frac{1}{2}\cdot\frac{-\sqrt{3}}{2} = -3\sqrt{3}$