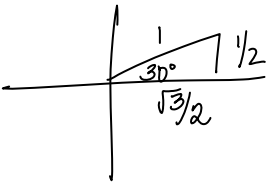
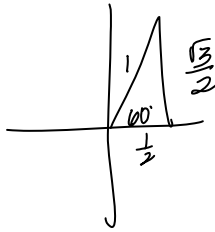


Set up a reference triangle to answer the following questions.

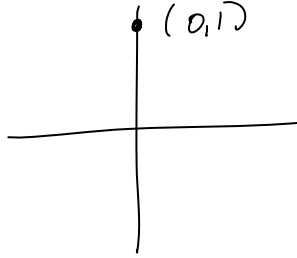
1)  $\cos 30^\circ = \frac{\sqrt{3}}{2}$



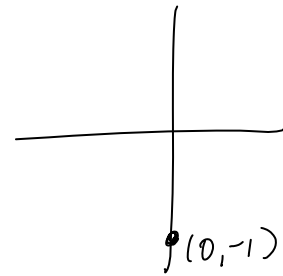
2)  $\sin 60^\circ = \frac{\sqrt{3}}{2}$



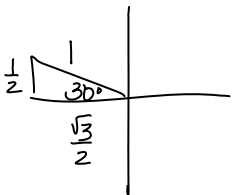
3)  $\tan 90^\circ = \text{und}$



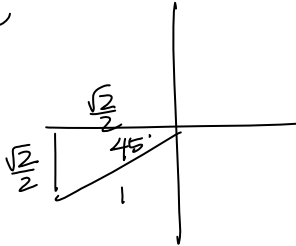
4)  $\tan 270^\circ = \text{und}$



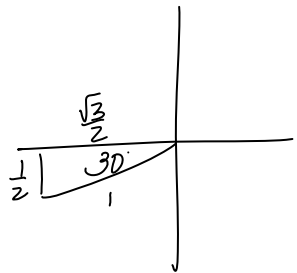
5)  $\cos 150^\circ = -\frac{\sqrt{3}}{2}$



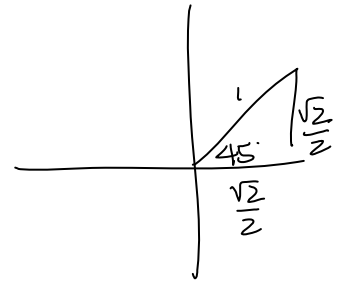
6)  $\sin(-135^\circ) = -\frac{\sqrt{2}}{2}$



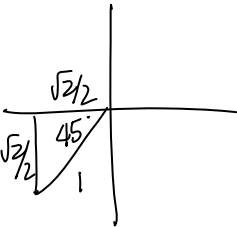
7)  $\cos(210^\circ) = -\frac{\sqrt{3}}{2}$



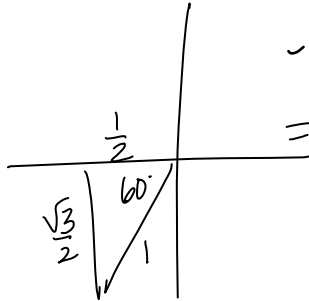
8)  $\tan(-315^\circ) = 1$



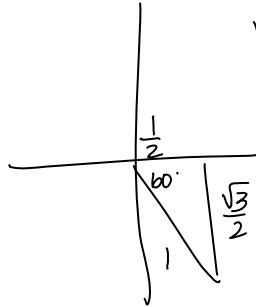
9)  $\sec 225^\circ = -\frac{2}{\sqrt{2}} = -\sqrt{2}$



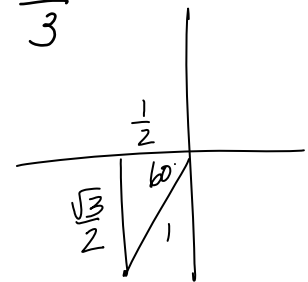
10)  $\cot 240^\circ = \frac{-1/2}{\sqrt{3}/2} = -\frac{1}{\sqrt{3}} = -\frac{\sqrt{3}}{3}$



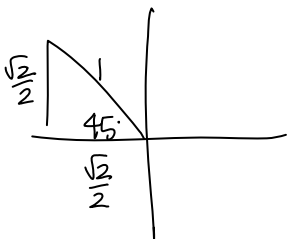
11)  $\csc 300^\circ = \frac{-2}{\sqrt{3}} = -\frac{2\sqrt{3}}{3}$



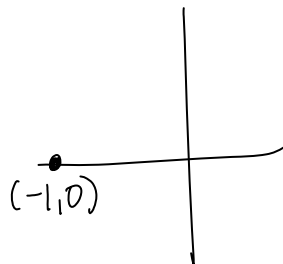
12)  $\sin 240^\circ = -\frac{\sqrt{3}}{2}$



13)  $\cot(-225^\circ) = -1$

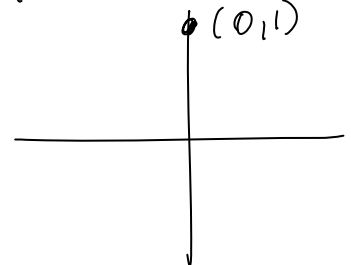


14)  $\tan 180^\circ = 0$

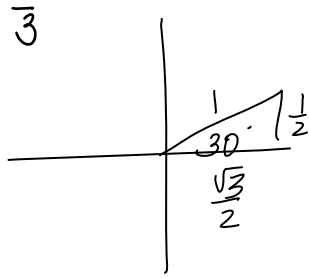
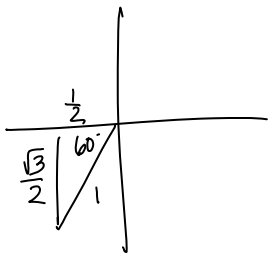


15)  $\cot 180^\circ = \text{und}$

16)  $\sec 90^\circ = \frac{1}{0} = \text{und}$

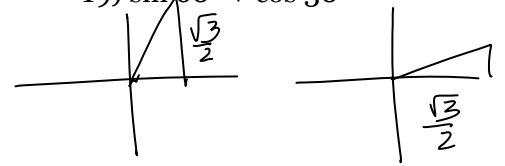


$$17) \cot(-120^\circ) = \frac{1}{\frac{1}{2}} = \frac{1}{\frac{\sqrt{3}}{2}} = \frac{2}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$



$$18) \sec(-330^\circ) = \frac{2}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$

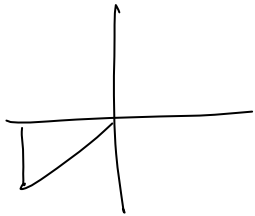
$$19) \sin 60^\circ + \cos 30^\circ$$



$$= \frac{\sqrt{3}}{2} + \frac{\sqrt{3}}{2}$$

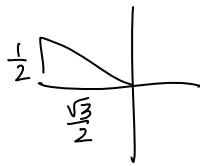
$$= \sqrt{3}$$

$$20) \tan 225^\circ \sec 225^\circ$$



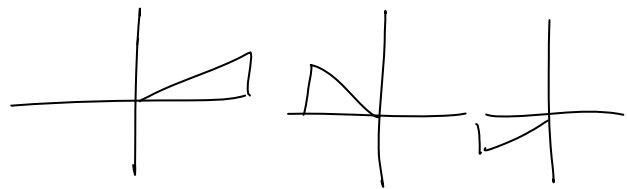
$$= 1 \cdot \frac{-2}{\sqrt{2}} = \frac{-2}{\sqrt{2}} = -\sqrt{2}$$

$$21) 12 \sin 150^\circ \cos 150^\circ$$



$$12 \cdot \frac{1}{2} \cdot \frac{-\sqrt{3}}{2} = -3\sqrt{3}$$

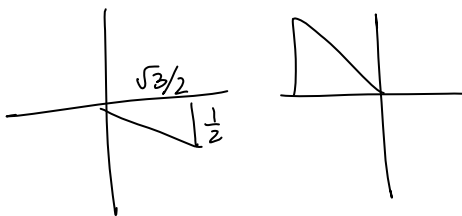
$$22) \cos 30^\circ \sin 135^\circ - \sin 45^\circ \cos 210^\circ$$



$$= \frac{\sqrt{3}}{2} \cdot \frac{\sqrt{2}}{2} + \frac{\sqrt{2}}{2} \cdot \frac{\sqrt{3}}{2}$$

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

$$23) \cot(-30^\circ) \sin 135^\circ$$

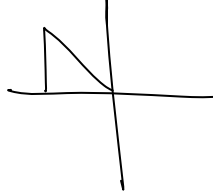


$$= \frac{-\sqrt{3}}{\frac{1}{2}} \cdot \frac{\sqrt{2}}{2}$$

$$= -\sqrt{3} \cdot \frac{\sqrt{2}}{2}$$

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

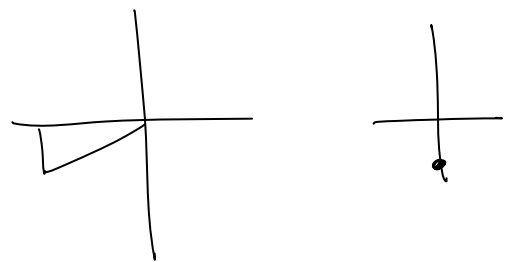
$$24) \sin(-225^\circ) + \cos 45^\circ$$



$$= \frac{\sqrt{2}}{2} + \frac{\sqrt{2}}{2}$$

$$= \sqrt{2}$$

$$25) \sec 210^\circ \sin(-270^\circ)$$



$$= \frac{-2}{\sqrt{3}} \cdot -1$$

$$= \frac{2}{\sqrt{3}} = \frac{2\sqrt{3}}{3}$$