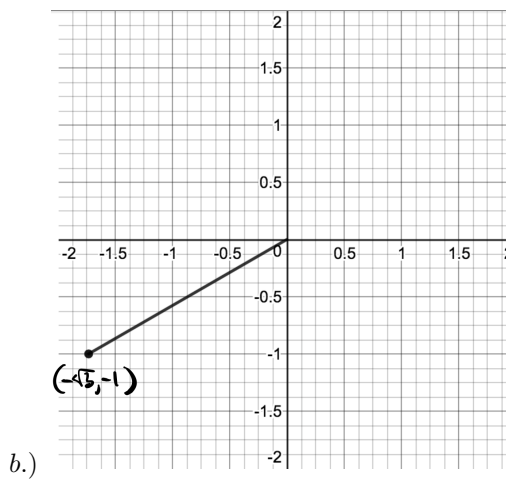
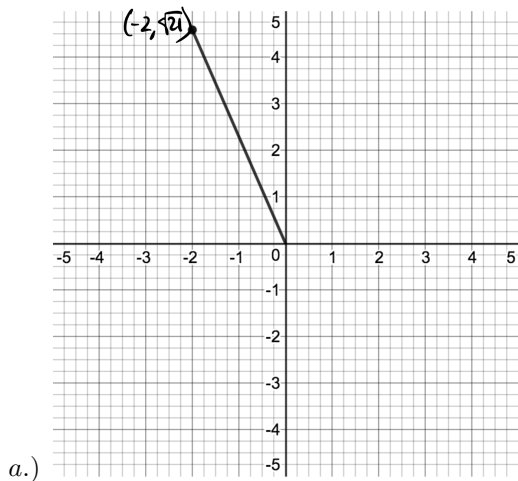


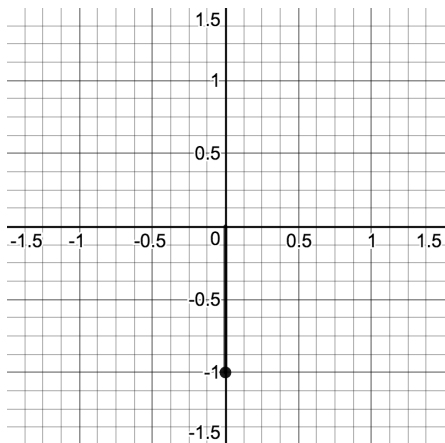
§1.4: Trigonometric Functions of Any Angle

1.] Find the exact values of the six trigonometric functions of the angle θ below:



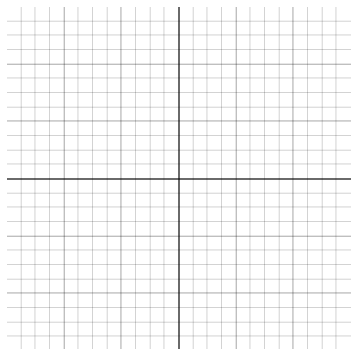
2.] Suppose that $\tan(\theta) = \frac{15}{8}$ and $\sin(\theta) > 0$. Find the exact values of the remaining trigonometric functions of θ

3.] Evaluate the six trigonometric functions at $\theta = \frac{3\pi}{2}$.

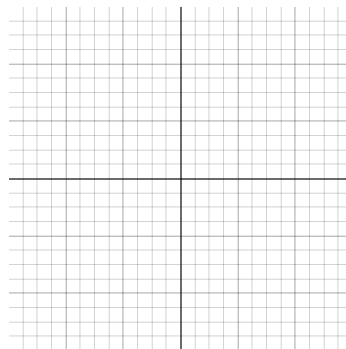


- 4.] For each angle θ below, find the reference angle θ' in both degrees and radians, and sketch the terminal side of θ .

a.) $\theta = \frac{7\pi}{6}$

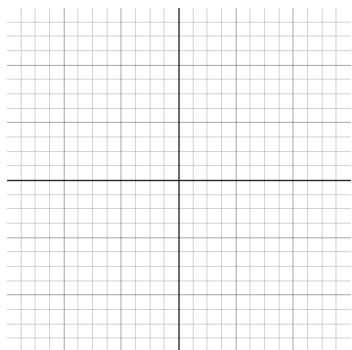


b.) $\theta = 160^\circ$

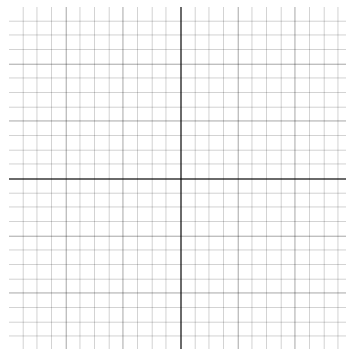


- 5.] For each angle below, evaluate the sine, cosine, and tangent of the angle by constructing the reference angle. (Do not use a calculator.)

a.) $\theta = \frac{11\pi}{4}$



b.) $\theta = 300^\circ$



- 6.] Calculate the following trigonometric values. Find the exact value if possible; otherwise, use a calculator and round to four decimal places. Sketch the angle in every case.

a.) $\sin(10^\circ)$

b.) $\cos\left(-\frac{17\pi}{6}\right)$

c.) $\sec\left(\frac{11\pi}{8}\right)$