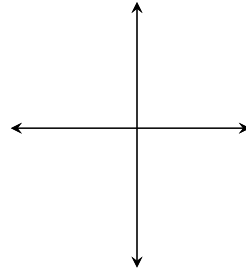
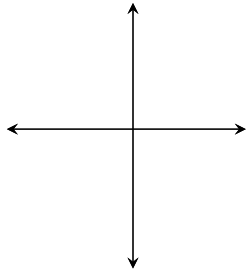


Trigonometric Functions of Any Angle (4.4)

Evaluating Trigonometric Functions: A point on the terminal side of angle θ is given. Find the exact value of each of the six trigonometric functions of θ .

1) $(12, -13)$

2) $(-6, -8)$



Finding the Quadrant: Let θ be an angle in standard position. Name the quadrant in which θ lies.

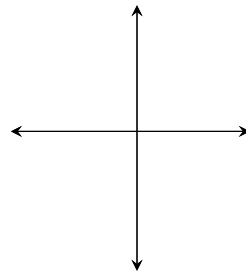
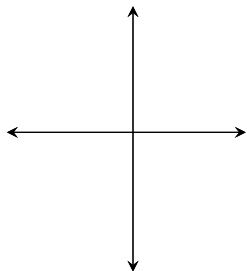
3) $\tan \theta < 0, \sec \theta > 0$

4) $\sin \theta > 0, \tan \theta < 0$

Evaluating Trigonometric Functions: Find the exact value of each of the remaining six trigonometric functions of θ .

5) $\sec \theta = -2, \tan \theta > 0$

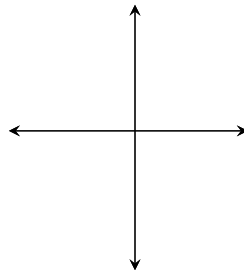
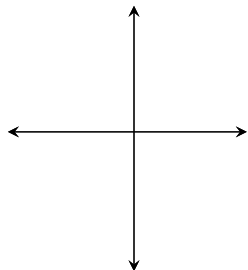
6) $\cos \theta = \frac{4}{5}, \frac{3\pi}{2} < \theta < 2\pi$



Finding Reference Angles: Find the reference angle for each angle.

7) 565°

8) $-\frac{11\pi}{4}$



Using Reference Angles: Find the exact value using a reference angle.

9) $\tan \frac{11\pi}{6}$

10) $\csc\left(-\frac{11\pi}{4}\right)$

