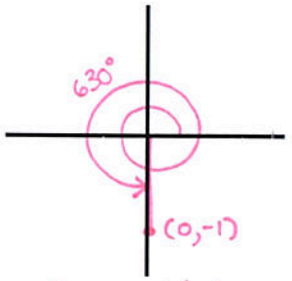
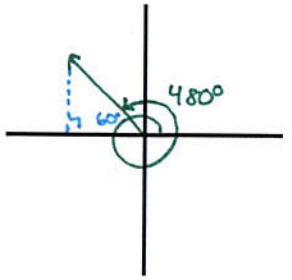
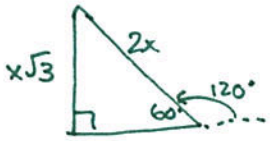
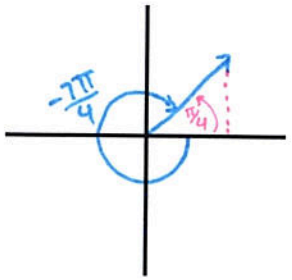
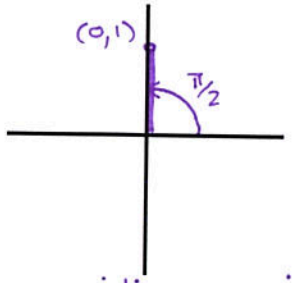
Verbal	Graphical
$\theta = 630°$ What quadrant is the terminal side of θ in? N/A Is θ a quadrantal angle? yes $\theta = 270° + 360°$ ☹	Sketch θ and the reference angle or indicate the position of the quadrantal.  θ is on negative y-axis

Reference Angle	Values of Trig Functions
Calculate the value of the reference angle of θ or name the axis of the quadrantal. $\alpha =$ y-axis (negative) Does α correspond to an angle that is part of a special right triangle? no If yes, sketch the special right triangle with the appropriate labels.	Calculate the values of the six trigonometric functions of the angle θ. $\sin\theta = -1$ $\quad \csc\theta = -1$ $\cos\theta = 0$ $\quad \sec\theta = \text{DNE}$ $\tan\theta = \frac{-1}{0} = \text{DNE}$ (or undefined) $\quad \cot\theta = 0$

Verbal	Graphical
$\theta = 480°$ What quadrant is the terminal side of θ in? II Is θ a quadrantal angle? no $\theta = 120° + 360°$ ☺	Sketch θ and the reference angle or indicate the position of the quadrantal. 

Reference Angle	Values of Trig Functions
Calculate the value of the reference angle of θ or name the axis of the quadrantal. $\alpha =$ 60° Does α correspond to an angle that is part of a special right triangle? yes If yes, sketch the special right triangle with the appropriate labels.  ↑ negative b/c QII	Calculate the values of the six trigonometric functions of the angle θ. $\sin\theta = \frac{x\sqrt{3}}{2x}$ $\quad \sin\theta = \frac{\sqrt{3}}{2}$ $\csc\theta = \frac{2}{\sqrt{3}}$ or $\frac{2\sqrt{3}}{3}$ $\cos\theta = \frac{-x}{2x}$ $\quad \cos\theta = -\frac{1}{2}$ $\sec\theta = -2$ $\tan\theta = \frac{x\sqrt{3}}{-x}$ $\quad \tan\theta = -\sqrt{3}$ $\cot\theta = \frac{-1}{\sqrt{3}}$ or $-\frac{\sqrt{3}}{3}$

Verbal	Graphical
$\theta = -\frac{7\pi}{4}$ What quadrant is the terminal side of θ in? I Is θ a quadrantal angle? no $\theta = \pi/4 - 8\pi/4$ ☺	Sketch θ and the reference angle or indicate the position of the quadrantal. 
Reference Angle	**Values of Trig Functions**
Calculate the value of the reference angle of θ or name the axis of the quadrantal. $\alpha =$ $\pi/4$ (45°) Does α correspond to an angle that is part of a special right triangle? yes If yes, sketch the special right triangle with the appropriate labels. 	Calculate the values of the six trigonometric functions of the angle θ. $\sin\theta = \frac{x}{x\sqrt{2}} = \frac{1}{\sqrt{2}}$ → $\csc\theta = \sqrt{2}$ $\sin\theta = \frac{\sqrt{2}}{2}$ $\cos\theta = \frac{x}{x\sqrt{2}} = \frac{1}{\sqrt{2}}$ → $\sec\theta = \sqrt{2}$ $\cos\theta = \frac{\sqrt{2}}{2}$

Verbal	Graphical
$\theta = \frac{\pi}{2}$ What quadrant is the terminal side of θ in? N/A Is θ a quadrantal angle? yes	Sketch θ and the reference angle or indicate the position of the quadrantal.  θ is on positive y-axis
Reference Angle	**Values of Trig Functions**
Calculate the value of the reference angle of θ or name the axis of the quadrantal. $\alpha =$ y-axis (positive) Does α correspond to an angle that is part of a special right triangle? no If yes, sketch the special right triangle with the appropriate labels.	Calculate the values of the six trigonometric functions of the angle θ. $\sin\theta = 1$ $\quad \csc\theta = 1$ $\cos\theta = 0$ $\quad \sec\theta =$ DNE $\tan\theta = \frac{1}{0} =$ DNE $\quad \cot\theta = 0$