

HW 5.3 #1. - p.400 27-33 odd, 37

27.) $\sin > 0, \cos < 0$

* Since both aren't pos, Quad 1 is out. Therefore, what quadrant is the sine positive? Quad. 2

(+)	(+)
Sin/ csc	All
Tan/ cot (+)	Cos/ sec (+)

29.) $\sin < 0, \tan < 0$

* Quad 1 is out. what Quad is sine + tangent negative? Quad. 4

31.) $\cos > 0, \tan < 0$

* Quad 1 is out. What Quad is cos positive? Quad 4

33.) $\sec < 0, \sin > 0$

* Quad 1 is out. What Quad is sine positive? Quad 2

37.) $\sin \theta = \frac{2\sqrt{5}}{5}, \cos \theta = \frac{\sqrt{5}}{5}$, Find the remaining 4 trig functions

$\tan \theta = \frac{\sin \theta}{\cos \theta} = \frac{\frac{2\sqrt{5}}{5}}{\frac{\sqrt{5}}{5}} = \frac{2}{1} = \textcircled{2}$ $\cot \theta = \textcircled{\frac{1}{2}}$

$\csc \theta = \frac{1}{\sin \theta} = \frac{1}{\frac{2\sqrt{5}}{5}} = \frac{5}{2\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{5\sqrt{5}}{10} = \textcircled{\frac{\sqrt{5}}{2}}$

$\sec \theta = \frac{1}{\cos \theta} = \frac{1}{\frac{\sqrt{5}}{5}} = \frac{5}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{5\sqrt{5}}{5} = \textcircled{\sqrt{5}}$