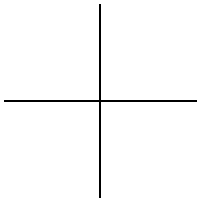
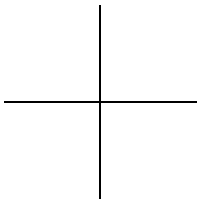
PC 12 LG 6 Worksheet (Ratios From Ratios)

If $\angle D$ is an angle in standard position, in which quadrants may $\angle D$ terminate if:

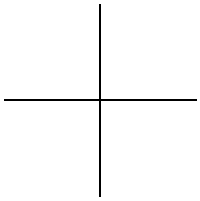
1. $\sec D < 0$



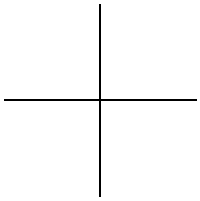
2. $\sin D > 0, 0 \le D < 2\pi$



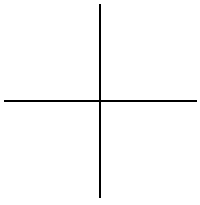
3. $\tan D < 0$ and $\pi \le D < 2\pi$



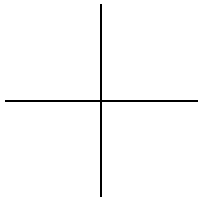
4. $\sec D > 0$ and $\frac{-\pi}{2} \le D < \pi$



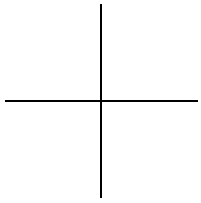
5. $\csc D < 0$ and $-\pi \le D < \frac{\pi}{2}$



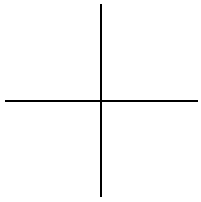
6. $\sec D > 0$ and $\cot D < 0$



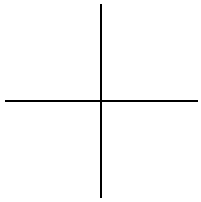
7. $\csc D > 0$ and $\cos D < 0$



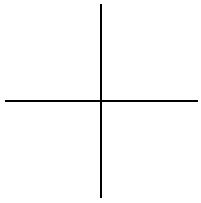
8. $\csc D > 0$ and $\frac{\pi}{2} \le D < \frac{3\pi}{2}$



9. $\sin D < 0$ and $-\pi \le D < \pi$



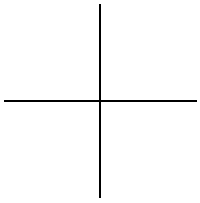
10. $\csc D > 0$ and $-\pi \le D < 0$



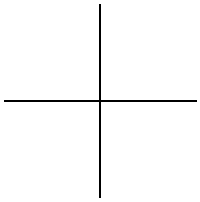
PC 12 LG 6 Worksheet (Ratios From Ratios)

If $\sin A = \frac{-1}{3}$, find all of the values of sec A when:

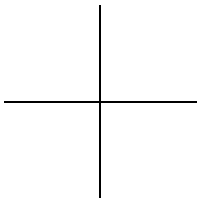
11. $0 \le A < 2\pi$



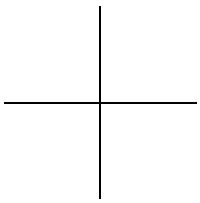
12. $-\pi \le A < \frac{\pi}{2}$



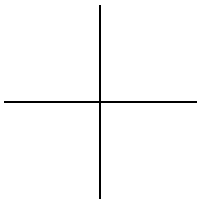
13. cot A > 0



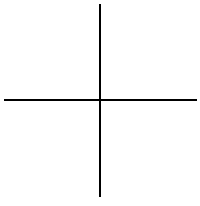
14. $\angle A$ terminates in quadrant IV



15. $\frac{-\pi}{2} \le A < \pi$



16. cos A < 0 and tan A > 0



Answer Key

1. II, III

2. I, II

3. IV

4. I, IV

5. III

6. IV

7. II

8. II

9. III, IV

10. None

11. $\frac{3}{2\sqrt{2}}, \frac{-3}{2\sqrt{2}}$

12. $\frac{3}{2\sqrt{2}}, \frac{-3}{2\sqrt{2}}$

13. $\frac{-3}{2\sqrt{2}}$

14. $\frac{3}{2\sqrt{2}}$

15. $\frac{3}{2\sqrt{2}}$

16. $\frac{-3}{2\sqrt{2}}$