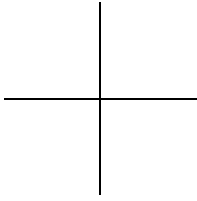


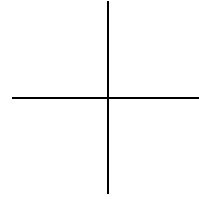
PC 12 LG 5 Worksheet (Ratios From Ratios)

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

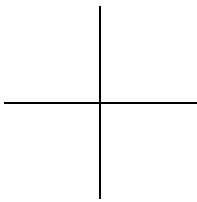
1. $\csc B < 0$



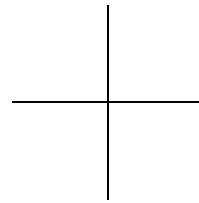
6. $\sin B > 0$ and $\tan B < 0$



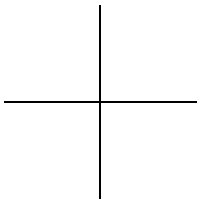
2. $\cot B > 0$



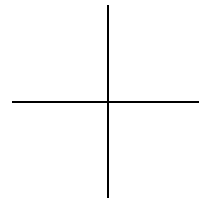
7. $\csc B < 0$ and $\cot B < 0$



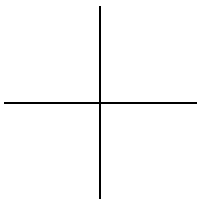
3. $\sin B < 0$ and $180^\circ \leq B < 360^\circ$



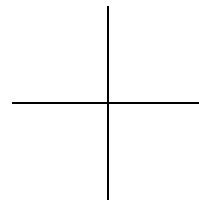
8. $\sec B < 0$ and $\tan B > 0$



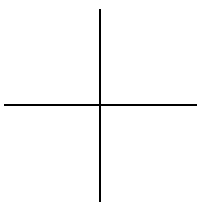
4. $\tan B > 0$ and $90^\circ \leq B < 270^\circ$



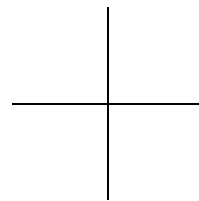
9. $\sin B < 0$ and $-90^\circ \leq B < 90^\circ$



5. $\sec B < 0$ and $180^\circ \leq B < 360^\circ$



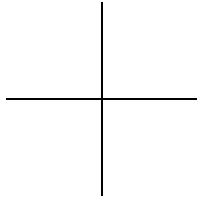
10. $\csc B > 0$ and $-180^\circ \leq B < 180^\circ$



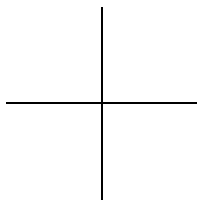
PC 12 LG 5 Worksheet (Ratios From Ratios)

If $\cos A = \frac{-3}{5}$, find all of the values of $\cot A$ when:

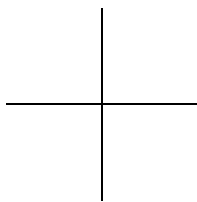
11. $0^\circ \leq A < 360^\circ$



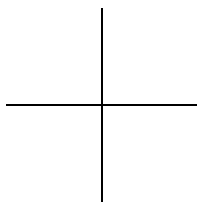
12. $-180^\circ \leq A < 90^\circ$



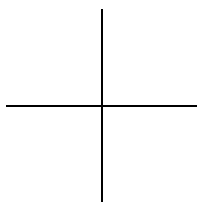
13. $\csc A > 0$



14. $\angle A$ terminates in quadrant III



15. $-90^\circ \leq A < 90^\circ$



16. The point (p, q) is a point of intersection of the terminal arm of $\angle \theta$ in standard position and the unit circle centered at $(0, 0)$. What is the value of $\csc \theta$?

17. The point (k, m) is on the terminal arm of $\angle \theta$ in standard position. What is the value of $\sec \theta$?

Answer Key

1. III, IV

2. I, III

3. III, IV

4. III

5. III

6. II

7. IV

8. III

9. IV

10. I, II

11. $\frac{4}{3}, \frac{-4}{3}$

12. $\frac{4}{3}$

13. $\frac{-4}{3}$

14. $\frac{4}{3}$

15. No soln.

16. $\frac{1}{q}$

17. $\frac{\sqrt{k^2 + m^2}}{k}$