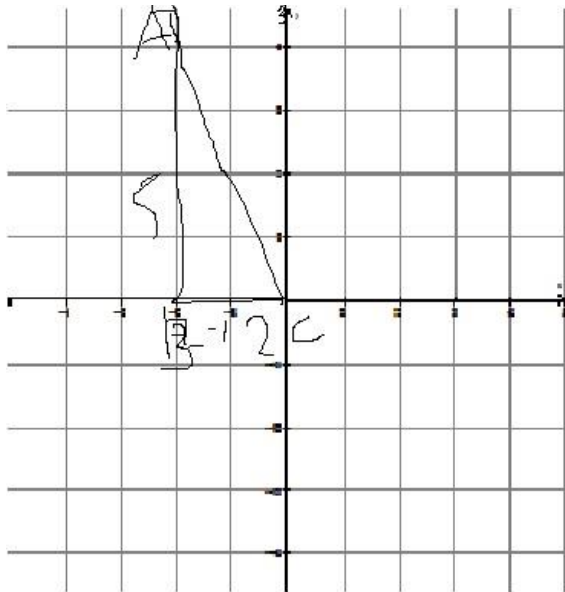


4. For a terminal arm with a point $(-2, 5)$. Determine which quadrant the arm lies in and sketch it in the space below. Then find the values of the primary trigonometric ratios and the measure of the principle angle. Leave answers in fraction form.



The arm lies in the second quadrant.

Let $BC = 2$

Let $AB = 5$

$$C = \arctan(\text{opp}/\text{adj})$$

$$C = \arctan(5/2)$$

$$C = 1.19 \text{ radians}$$

$$C = 1.19 * 180/\pi \text{ degrees}$$

$$C = 1.19 * 180/3.14 \text{ degrees}$$

$$C = 180(1.19)/3.14 \text{ degrees}$$

$$C = 57.3(1.19)/1$$

$$C = \sim 68^\circ /1$$