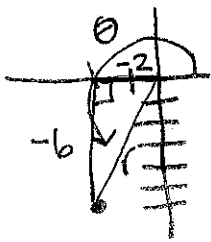


Warmup #8: Review

The terminal side of θ passes through $(-2, -6)$, find r and θ (in degrees).



$$(-2)^2 + (-6)^2 = r^2$$

$$4 + 36 = r^2$$

$$40 = r^2$$

$$\sqrt{40} = r$$

$$2 \cdot 2 \cdot 10$$

$$2\sqrt{10} = r$$

$$\theta = \tan^{-1}\left(\frac{-6}{-2}\right)$$

$$\theta = \tan^{-1}(3)$$

$$\theta = 71.57^\circ$$

$$+ 180$$

$$251.57^\circ$$