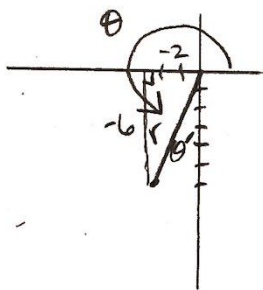


Warmup #8: Review

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



$$a^2 + b^2 = c^2$$

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

$$4 + 36 = c^2$$

$$40 = c^2$$

$$\sqrt{40} = c$$

$$2\sqrt{10} = \text{radius}$$

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

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

$$\theta = 71.57^\circ \text{ (reference angle)}$$

$$180^\circ + 71.57^\circ = \boxed{251.57^\circ}$$