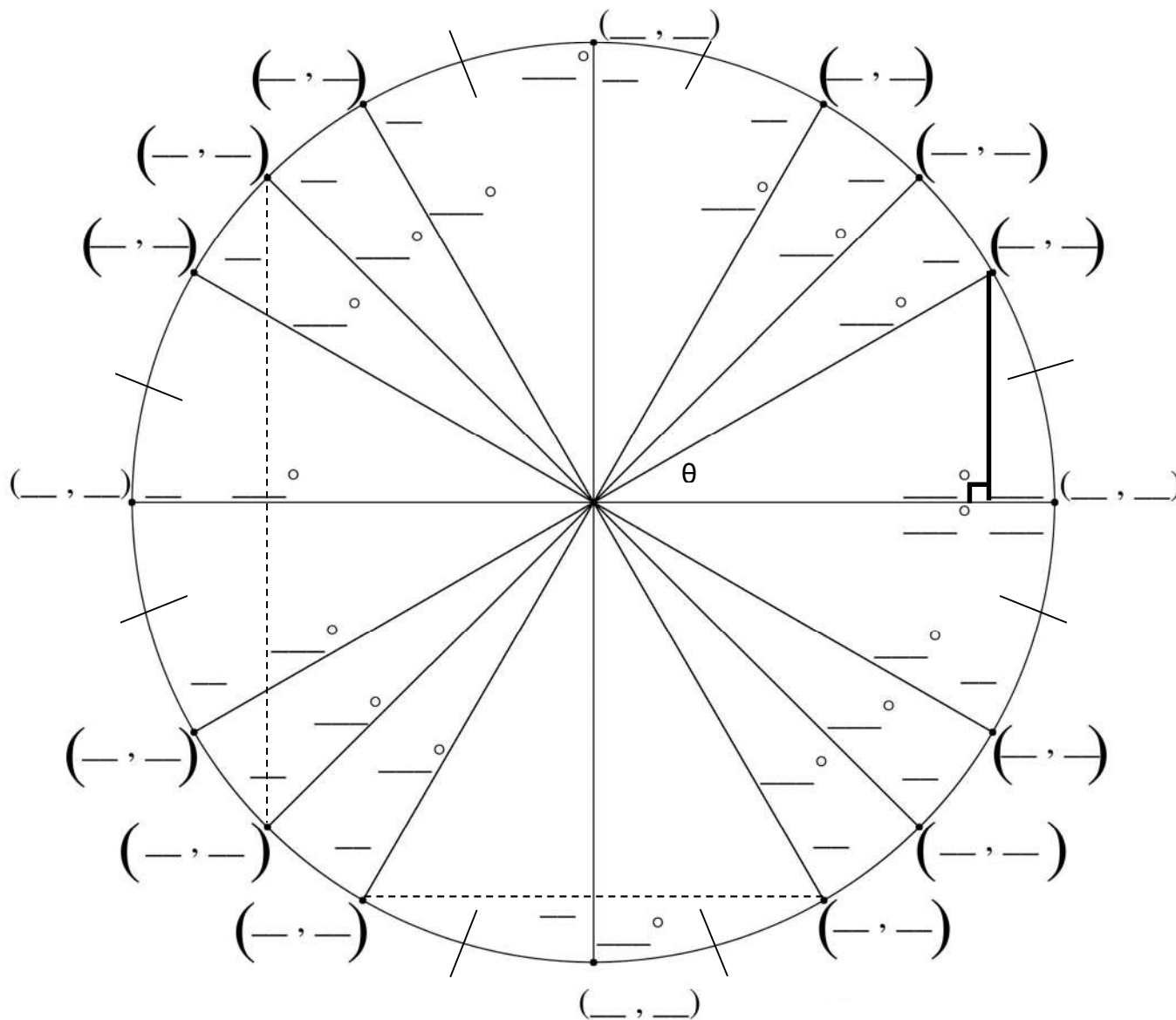


The Unit Circle

$$(x,y) \blacktriangleright (\cos \theta, \sin \theta)$$



- Notice tick marks cut each half into twelfths.
Use these to count out degrees ($360^\circ/12$) and radians ($\pi/12$).
- Try adding 180° or π – half a rotation – to go across the circle.
- Use the Pythagorean theorem to see the trig identity:

$$a^2 + b^2 = c^2 \blacktriangleright \sin^2 \theta + \cos^2 \theta = 1$$
- What do the dotted lines tell you?