SOLUTIONS

# Practice #21 Alg 2 Coterminal ∠'s & Radian Measure Thursday, April 23, 2020

1. Find a coterminal angle so that the measure falls between 0° and 360° → $0° \le \theta \le 360°$

a) $\theta = 875°$

$875 - 720 = 155°$

Coterminal ∠ = $155°$

b) $\theta = -530°$

$-530 + 720 = 190°$

Coterminal ∠ = $190°$

c) $\theta = 1503°$

$1503 - 1080 = 423°$

$423 - 360 = 63°$

Coterminal ∠ = $63°$

2. Convert each angle into degrees. Round to the nearest hundredth as necessary.

a) $\theta = \frac{7\pi}{10} \cdot \frac{180°}{\pi}$

$\frac{7\pi}{10} \rightarrow 126°$

b) $\theta = \frac{5\pi}{3} \cdot \frac{180°}{\pi}$

$\frac{5\pi}{3} \rightarrow 300°$

3. Convert each angle into radians. Leave your answer as a fraction in reduced form and in terms of $\pi$.

a) $\theta = 420° \cdot \frac{\pi}{180°}$ (÷60 / ÷60)

$420° \rightarrow \frac{7\pi}{3}$

b) $\theta = 100° \cdot \frac{\pi}{180}$ (÷20 / ÷20)

$100° \rightarrow \frac{5\pi}{9}$