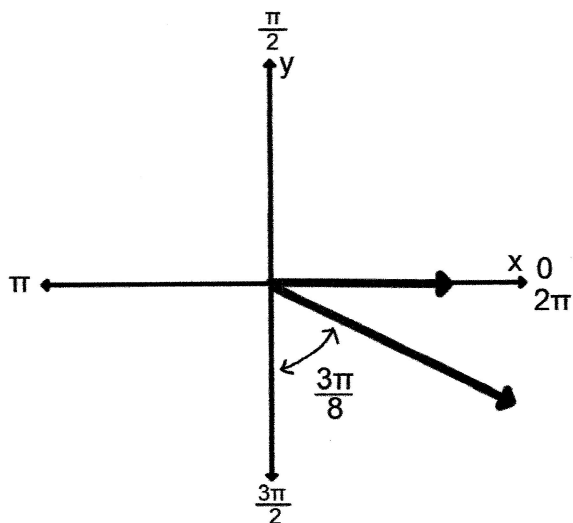# Bellwork   Alg 2   Tuesday, April 28, 2020

1. State in which quadrant the terminal sides of each angle will be located.

a) $\theta = 975^\circ$

b) $\theta = -740^\circ$

2. State a Positive and Negative measure, in radians, for the angle in Standard Position shown.
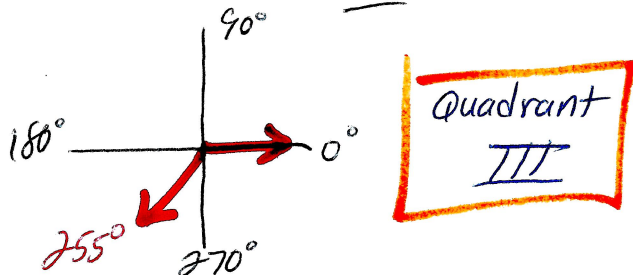

POS: NEG:

Bellwork   Alg 2   Tuesday, April 28, 2020   /Answers/

1. State in which quadrant the terminal sides of each angle will be located.

a) $\theta = 975°$

1ST Find a coterminal between $0° \& 360°$

$975° - 720° = 255°$

$255°$

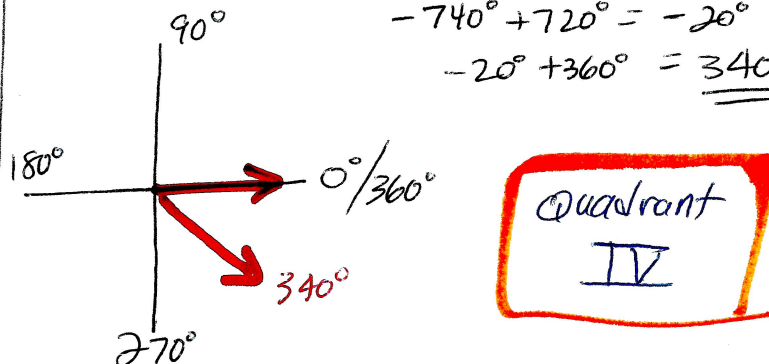**Quadrant III**

b) $\theta = -740°$

1ST find a coterminal between $0° \& 360°$

$-740° + 720° = -20°$

$-20° + 360° = 340°$

$340°$

Quadrant IV

2. State a Positive and Negative measure, in radians, for the angle in Standard Position shown.

$-\frac{\pi}{2}$
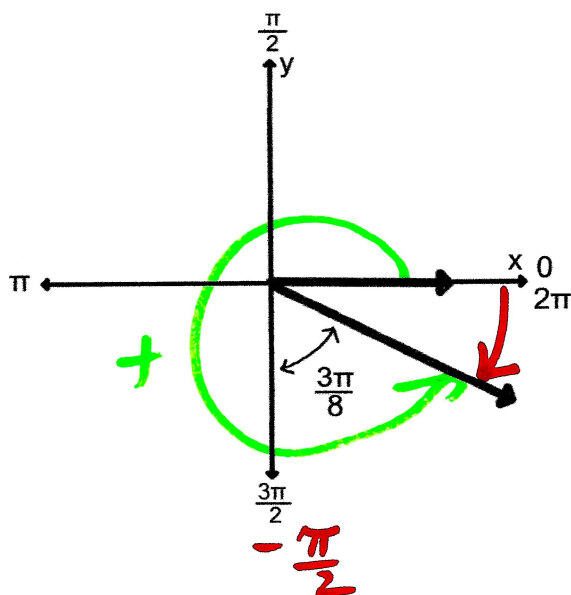
POS:

$\frac{3\pi}{8}$ past $\frac{3\pi}{2}$

$\theta = \frac{3\pi}{2} + \frac{3\pi}{8}$

$= \frac{3\pi}{2} \cdot \frac{4}{4} + \frac{3\pi}{8}$

$= \frac{12\pi}{8} + \frac{3\pi}{8}$

$$\theta = \frac{15\pi}{8}$$

NEG: $\frac{3\pi}{8}$ short of $\frac{\pi}{2}$ in a neg direction

$\theta = -\left(\frac{\pi}{2} - \frac{3\pi}{8}\right)$

$= -\left(\frac{\pi}{2} \cdot \frac{4}{4} - \frac{3\pi}{8}\right)$

$= -\left(\frac{4\pi}{8} - \frac{3\pi}{8}\right)$

$$\theta = -\frac{\pi}{8}$$

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