Trig Ratios II (4.3) p202 day 6

Enneagram 9 The Peacemaker

Natural mediators, inclusive
Flexible, see other viewpoints

Core longing: peace of mind
Core fear: loss / separation
Deadly sin: sloth

Can find it hard to get started
Often very easily distracted

least energy

"The more you nag"

Always let others choose - fade
Have elements of 8 others
Avoid conflict at all costs

Report card silverware

p202 day 6

14. The measure of angle θ in standard position is 4900°.
a) Describe θ in terms of revolutions. Be specific.
b) In which quadrant does 4900° terminate?
c) What is the measure of the reference angle?
d) Give the value of each trigonometric ratio for 4900°.

ex, 10a, 14

4900° ÷ 360°
= 13.611

0.111 × 360°
40°

Quiz tomorrow

9. Determine the ex
expression.
a) cos 60° + sin
b) (sec 45°)²
c) $\left(\cos\frac{5\pi}{3}\right)$(sec
d) (tan 60°)² − (
e) $\left(\cos\frac{7\pi}{4}\right)^2 + \left($
f) $\left(\cot\frac{5\pi}{6}\right)^2$

10. Determi
that sati
for each
a) sin θ
0 ≤ θ
b) cot θ
−π ≤
c) sec θ
−180
d) (cos
−360

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ex1: Solve $\sin\theta = -\frac{\sqrt{3}}{2}$ on $[0, 2\pi)$ rad domain $0 \le \theta < 2\pi$

$\theta = \frac{4\pi}{3}, \frac{5\pi}{3}$

b) What if the domain was $[-\pi, 2\pi)$

$\theta = \frac{4\pi}{3}, \frac{5\pi}{3}$
and $-\frac{2\pi}{3}, -\frac{\pi}{3}$

$-\frac{2\pi}{3}$ $-\frac{\pi}{3}$ π 0 2π

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ex2: Solve $\cos\theta = -0.366$ on $[0, 2\pi)$

$\theta = 1.95$
$2\pi - 1.95 = 4.34$

1.6 3.14 0 4.6

10% $[0, 2\pi)$

b) ~~What if the~~ domain was $[-\pi, \pi)$

$\theta = 1.95$ 2π
$4.34 - 6.28$
$= -1.94$

$-\pi$ π 0

$\cot\theta = 1$
$\tan\theta = \frac{1}{1}$
$\theta = \frac{\pi}{4}, \frac{5\pi}{4}$

$[0, 2\pi)$

11. b) $\tan\theta = -4.87$ $\left(-\frac{\pi}{2}, \pi\right)$

$\theta = -1.37$
$-1.37 + 3.14$
$= 1.77$

1.77 π 0 −1.37

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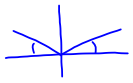
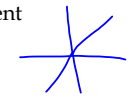
To find the other angle

sine  $\pi - \theta$ $180° - \theta$

cosine  $2\pi - \theta$ $360° - \theta$

tangent  $\theta + \pi$ $\theta + 180°$

$(6, 2\pi)$

11ab

S	A
T	C

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ex3: State the values of the 6 trig ratios for P(5, -3).

12ac

9b

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HW: p202 #11cd, 15

Quiz tomorrow

Attachments

quiz5.pdf