

2.2 Trig Ratios of Any Angle cont.

ex) Quadrantal angles - $0^\circ, 90^\circ, 180^\circ, 270^\circ, 360^\circ$

θ	0°	90°	180°	270°	360°
$\sin\theta$	0	1	0	-1	0
$\cos\theta$	1	0	-1	0	1
$\tan\theta$	0	und	0	und	0

$$\sin\theta = \frac{y}{r}$$

$$\cos\theta = \frac{x}{r}$$

$$\tan\theta = \frac{y}{x}$$

ex) Solving for θ (steps on pg. 94 top)

a) $\sin \theta = -\frac{1}{\sqrt{2}}$, $0^\circ \leq \theta \leq 360^\circ$

1. Q III & IV

2. Find θ_R

3. 225° & 315°

$\sin \theta_R = \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$
 $\theta_R = 45^\circ$

b) $\cos\theta = -0.9659, 0^\circ \leq \theta \leq 360^\circ$

1. Q II & III

2. Find θ_R

3. 165° & 195°



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 $\cos\theta_R = 0.9659$
 $\theta_R = 15^\circ$

Pg. 96-98 #1-9, 11
 #12-16, 18, 20, 22, 23