

MAT01191 – Vetores e Geometria Analítica – Professora Miriam Telichevsky  
 Lista de Exercícios 10 – Gabarito

$x$	$\text{sen}(x)$	$\text{cos}(x)$	$\text{tan}(x)$
$-\pi$	0	-1	0
$-3\pi/4$	$-1/\sqrt{2}$	$-1/\sqrt{2}$	1
$-\pi/2$	-1	0	$\cancel{\neq}$
$-\pi/3$	$-\sqrt{3}/2$	1/2	$-\sqrt{3}$
$-\pi/4$	$-1/\sqrt{2}$	$1/\sqrt{2}$	-1
$-\pi/6$	-1/2	$\sqrt{3}/2$	$-1/\sqrt{3}$
0	0	1	0
$\pi/6$	1/2	$\sqrt{3}/2$	$1/\sqrt{3}$
$\pi/4$	$1/\sqrt{2}$	$1/\sqrt{2}$	1
$\pi/3$	$\sqrt{3}/2$	1/2	$\sqrt{3}$
$\pi/2$	1	0	$\cancel{\neq}$
$3\pi/4$	$1/\sqrt{2}$	$-1/\sqrt{2}$	-1
$\pi$	0	-1	0

1.

2. Alerta: as respostas das linhas 1 a 4 não são únicas! Em caso de dúvida, consulte a professora!

Coord. cartesianas	coord. polares
(1, 0)	(1, 0)
(0, -3)	(3, $-\pi/2$ )
( $2\sqrt{3}$ , -2)	(4, $-\pi/6$ )
(-1/2, 1/2)	( $\sqrt{2}/2$ , $3\pi/4$ )
(-3, 0)	(3, $\pi$ )
( $\sqrt{2}$ , $\sqrt{2}$ )	(2, $\pi/4$ )
( $-\sqrt{2}$ , $-\sqrt{2}$ )	(-2, $\pi/4$ )
(5/2, $5\sqrt{3}/2$ )	(5, $\pi/3$ )
( $-\sqrt{3}$ , -1)	(2, $-5\pi/6$ )

3. A ordem das figuras é:

$$r = 5 \cos(7\theta)$$

$$r = 5 \text{sen}(7\theta)$$

$$r = (1 - 2 \text{sen}(\theta))$$

$$r = \theta/10$$

$$r = 4$$

$$r = 3 \cos(2\theta)$$

$$r = 3 \text{sen}(2\theta)$$

$$r = 2[\text{sen}(\theta)]^2$$

$$r = 2[\cos(\theta)]^2$$

$$r = 3 \cos(\theta)$$

$$r = \frac{1}{\cos(x)}$$

$$\theta = \pi/6$$