

$$r = 5 \cos(3\theta) \quad \text{odd} = 3$$
$$r = 6 \sin(6\theta) \quad \text{even double} = 12$$

$$y = 3x - 7$$

$$t = 1 - x$$

$$x = 1 - t$$

$$x = 1 - t$$

$$y = -4 - 3t$$

$$y = 3(1 - t) - 7$$

$$y = -4 - 3t$$

$$r = 2 \sec \theta$$

$$r = 2 \cdot \frac{1}{\cancel{\cos \theta}} \cdot \cancel{\cos \theta}$$

$$\boxed{r \cos \theta} = 2$$

$$x = 2$$

$$r \cdot r = 6 \sin \theta \cdot r$$

$$r^2 = 6 r \sin \theta$$

$$x^2 + y^2 = 6y$$

$$x^2 + y^2 - 6y = 0$$

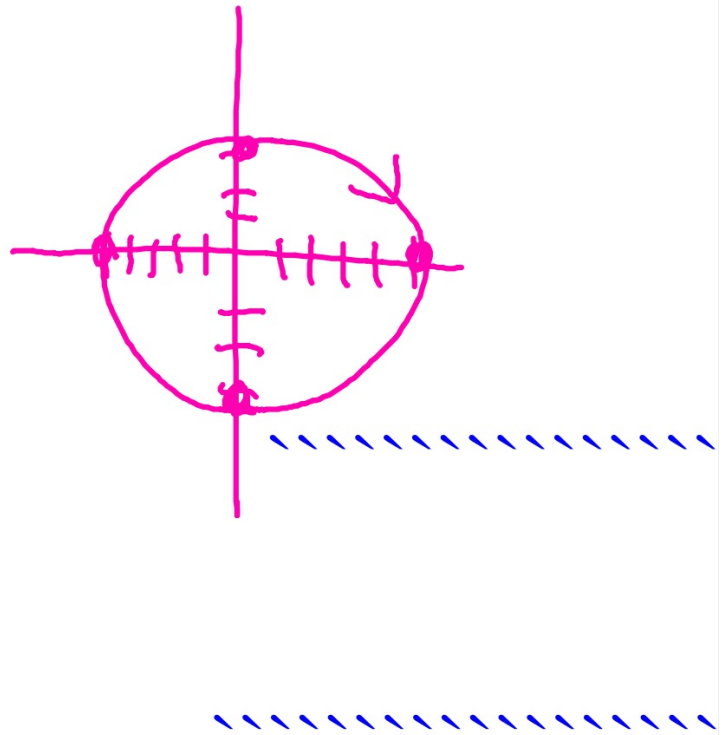
$$x^2 + \boxed{y^2 - 6y + 9} = 9$$

$$x^2 + (y-3)^2 = 9$$

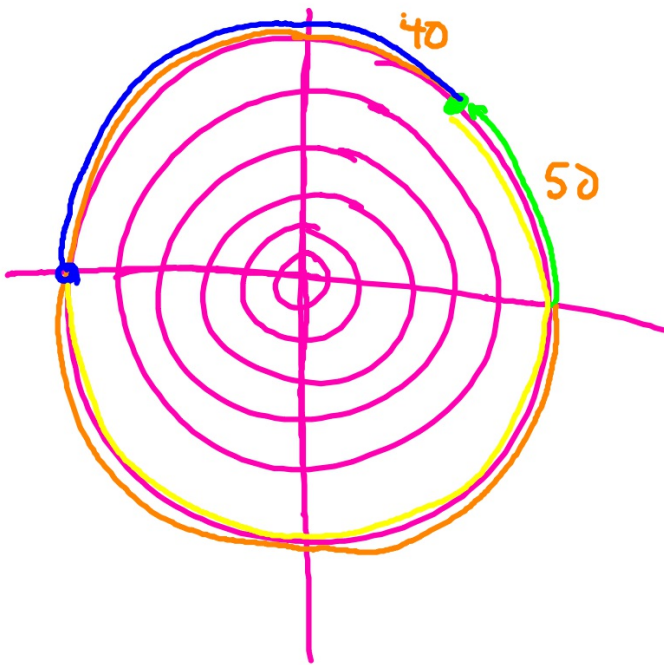
$$x = 5 \sin \theta$$

$$y = 3 \cos \theta$$

θ	x	y
0	0	3
$\frac{\pi}{2}$	5	0
π	0	-3
$\frac{3\pi}{2}$	-5	0
2π	0	3



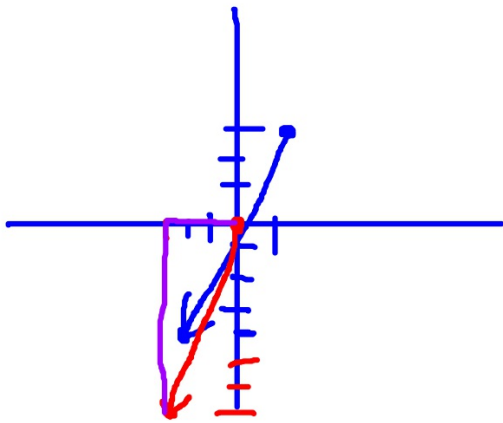
$(6, 50^\circ)$



$(6, -310^\circ)$

$(-6, -130^\circ)$

$(-6, 230^\circ)$



$P(1, 3)$ ini

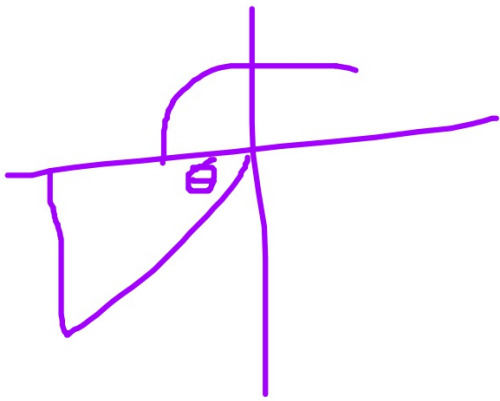
$Q(-2, -4)$ tu

$$\langle -2-1, -4-3 \rangle$$

$$\langle -3, -7 \rangle$$

$$\sqrt{9+49}$$

$$\left\langle \frac{-3}{\sqrt{58}}, \frac{-7}{\sqrt{58}} \right\rangle$$



$$a_2 = 3 \quad a_7 = 15$$

$$d = \frac{12}{5}$$

$$a_n = \frac{3}{5} + (n-1) \frac{12}{5}$$

$$a_n = \frac{3}{5} + \frac{12}{5}n - \frac{12}{5}$$

$$a_n = \frac{12}{5}n - \frac{9}{5}$$

$$a_6 = \frac{12}{5}(6) - \frac{9}{5}$$

$$a_6 = \frac{72 - 9}{5}$$

$$a_6 = \frac{63}{5}$$

c. 6th partial sum.

$$S_6$$

add together the 1st 6 member of the sequence.

$$S_n = \frac{n}{2}(a_1 + a_n)$$

$$S_6 = \frac{6}{2} \left(\frac{3}{5} + \frac{63}{5} \right)$$

$$S_6 = 3 \left(\frac{66}{5} \right)$$

$$S_6 = \frac{198}{5}$$

Calculator

$L_1 \rightarrow$ term #

$L_2 \rightarrow$ term

- Stat/calc/4/VARS/YVARS/E/E/E

Target eqn

- To predict a value:

2nd/Window : enter term #

2nd/Graph \rightarrow answer

Partial Sum

2nd/STAT/MATH/5/2nd/STAT/OPS/5

sum(seq(formula, X, start, end))

might be
in Y₁

VARs/YVARs/E/E