

PENANG SANGAM HIGH SCHOOL
DEPARTMENT OF MATHEMATICS/PHYSICS
YEAR 11 MATHEMATICS - WEEK 21

STRAND 4

Sub – Strand 4.1

GRAPHS

GRAPHS

Learning Objective

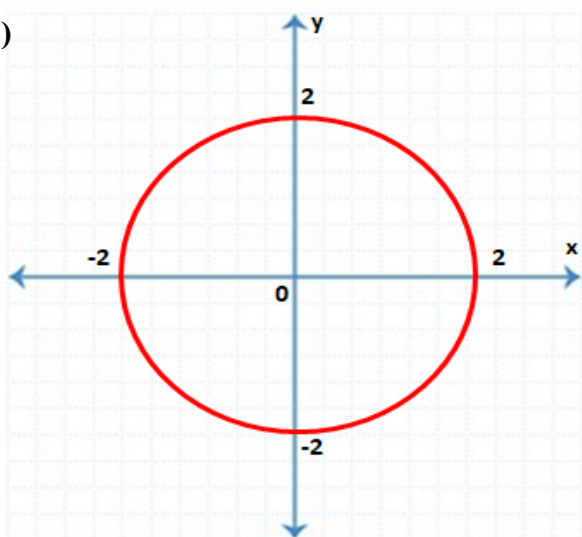
At the end of this lesson, students should be able to:

- Describe circular graphs

Describing Circular Graph

Example: Find the equation for the following circle.

1)



$$\text{Center} = (0,0)$$

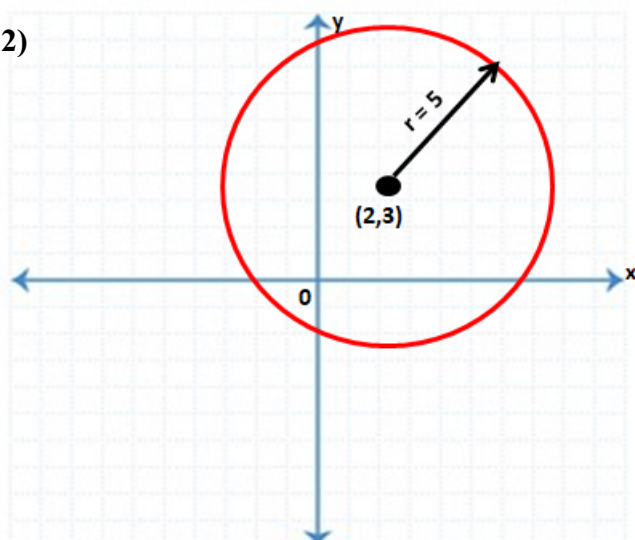
$$\text{Radius} = 2$$

$$x^2 + y^2 = r^2$$

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

$$\therefore x^2 + y^2 = 4$$

2)



$$\text{Center} = (a,b)$$

$$a = 2$$

$$b = 3$$

$$\text{Radius} = 5$$

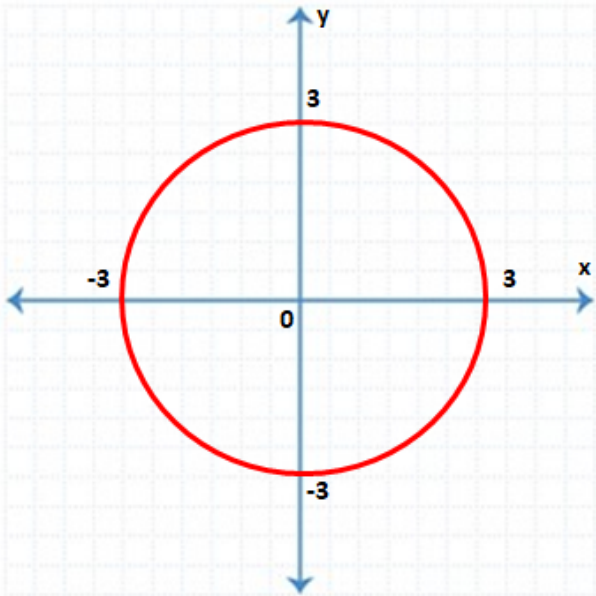
$$(x - a)^2 + (y - b)^2 = r^2$$

$$(x - 2)^2 + (y - 3)^2 = 5^2$$

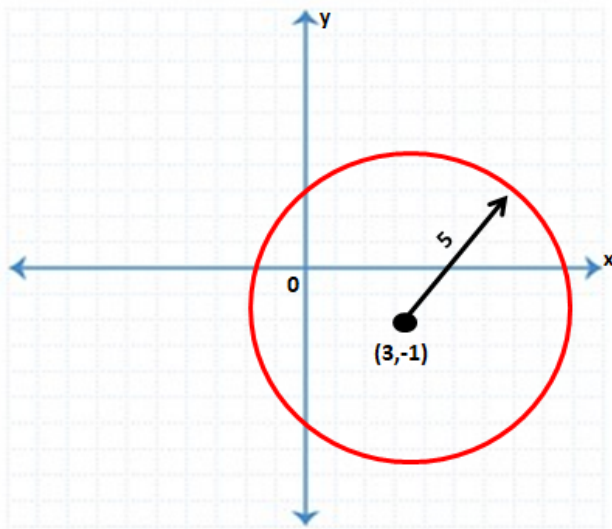
$$\therefore (x - a)^2 + (y - b)^2 = 25$$

Exercise:

1. Write down the equation of the following circle.



2. Write down the equation of the circle in standard form



THE END