Equations of a circle

<https://byjus.com/maths/equation-of-a-circle/>

<https://www.khanacademy.org/math/geometry/xff63fac4:hs-geo-conic-sections/hs-geo-circle-expanded-equation/a/circle-equation-review#:~:text=We%20know%20that%20the%20general,and%20r%20is%20the%20radius>.

Is the standard equation of a circle where h,k are the coordinates of the centre point of the circle and r is the radius of the circle.

Ex: The center of the circle is at the origin and radius of that circle is 8units

(origin)

Ex: Consider a circle with its centre at (1,2) with a radius of 3

Finding the centre and radius of a circle given its equation.

Ex:

Comparing the above equation with

Therefore, the centre point of the circle is (6,8) with a radius of 9 units.