

Equation of a Circle: Question 5

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$$A = (-1, 1) \tag{1}$$

$$(-1 - 3)^2 + 1^2 = 17 \tag{2}$$

$$17 < 49 \tag{3}$$

Point A is inside the circle.

$$B = (10, 0) \tag{4}$$

$$(10 - 3)^2 + (0)^2 = 49 \tag{5}$$

$$49 = 49 \tag{6}$$

Point B is on the circle.

$$C = (4, -8) \tag{7}$$

$$(4 - 3)^2 + (-8)^2 = 65 \tag{8}$$

$$65 > 49 \tag{9}$$

Point C is outside the circle.

You can also see the points visually on the graph below.

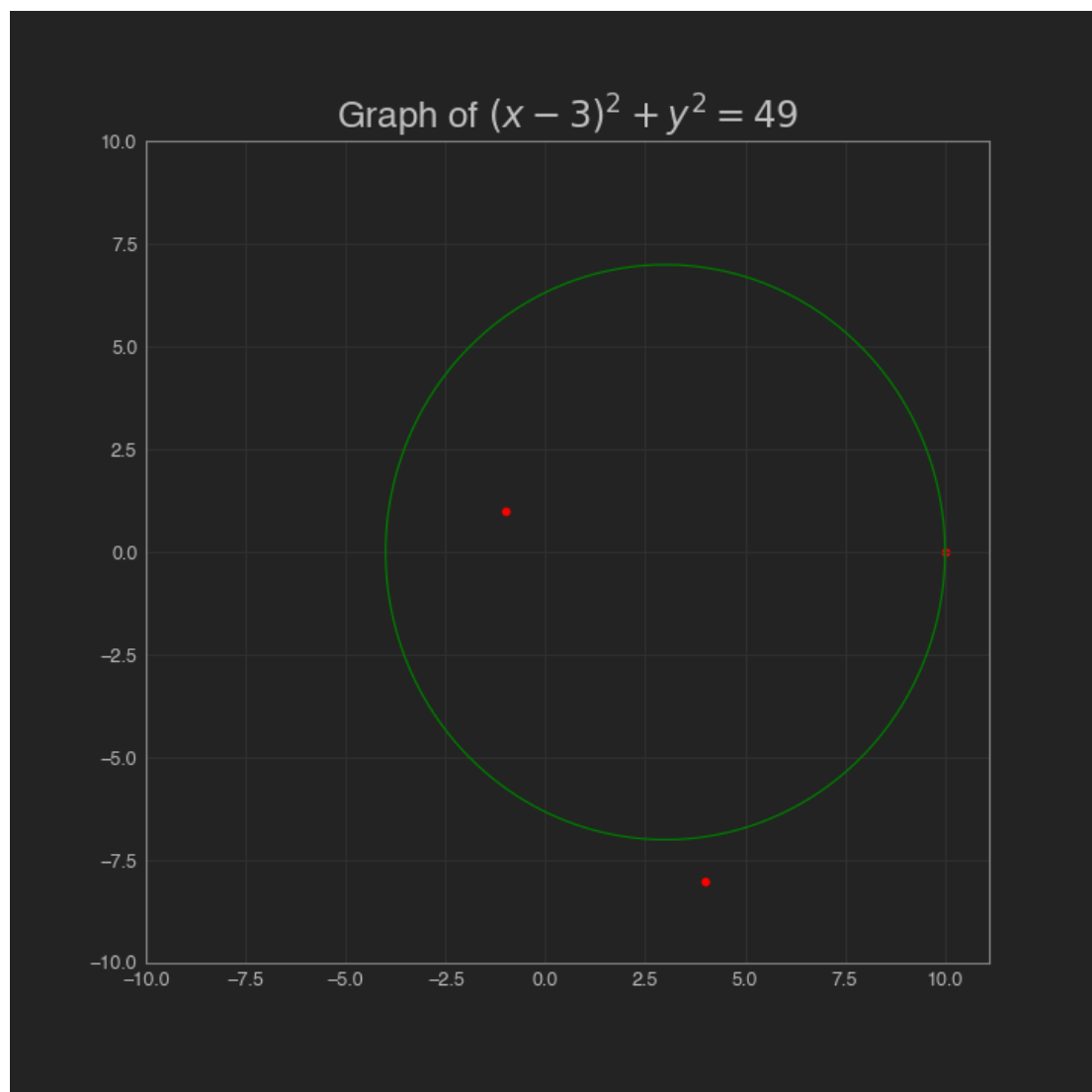


Figure 1: Graph of Circle