Coordinate Geometry Unit Exam: Question 41

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We simply plot each coordinate into the equation of a circle.

$$A(-1, 1) \tag{1}$$
$$(-1 + 1)^2 + (1)^2 = 36 \rightarrow 1 < 36 \tag{2}$$

The point is inside the circle.

$$B(-1, 6) \tag{3}$$
$$(-1 + 1)^2 + (6)^2 = 36 \rightarrow 36 = 36 \tag{4}$$

The point is on the circle.

$$C(4, -8) \tag{5}$$
$$(4 + 1)^2 + (-8)^2 = 36 \rightarrow 25 + 64 > 36 \tag{6}$$

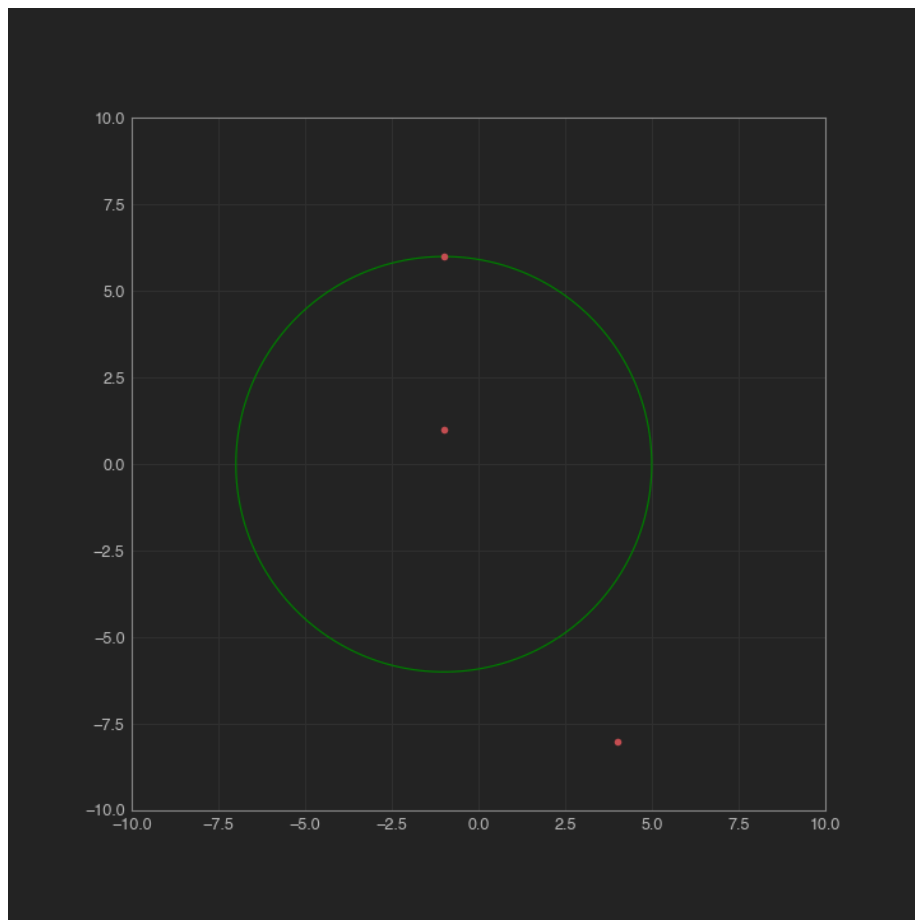The point is outside on the exterior of the circle. A visual representation of above is shown below.

Figure 1: Circle with Points