

Math 1513 - College Algebra

Quiz #7 - 2011.09.08

Solutions

1. State the formula for the equation of the circle with center at (h, k) and radius r .

$$(x - h)^2 + (y - k)^2 = r^2$$

2. Solve: $5p^2 - 6p + 3 = 0$

We use the quadratic formula with $a = 5$, $b = -6$ and $c = 3$:

$$\begin{aligned}x &= \frac{6 \pm \sqrt{36 - 4(5)(3)}}{2(5)} \\&= \frac{6 \pm \sqrt{-24}}{10} \\&= \frac{6 \pm i 2\sqrt{6}}{10} \\&= \frac{3 \pm i\sqrt{6}}{5}\end{aligned}$$