

**King Fahd University of Petroleum and Minerals**  
**College of Science, Math Prep-Year Program**  
**Math 001- Term 051 A**  
**Quiz# 3**

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**Name:** \_\_\_\_\_ **S/N:** \_\_\_\_\_ **ID:** \_\_\_\_\_ **Sec:** \_\_\_\_\_  
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**Question1 (2pts)**

The numerator of a fraction is 4 less than the denominator. If the numerator is increased by 14 and the denominator is decreased by 10, the resulting number is 5. What is the original fraction?

**Question3 (4pts)**

Solve the equation  $4x^2 - 3x + 15 = x$  by **completing the square**.

**Question3 (4pts)**

If the discriminant of the equation  $x^2 + 4x + (k - 1) = 0$  is equal to 8, then

- i) find  $k$
- ii) find the roots of the equation