

King Fahd University of Petroleum and Minerals
Prep-Year Math Program
Math 001 - Term 061
Recitation Hour (P3 & P4)

Question1

Given the polynomial $(2x - 1)(2 - x) + (3x - 1)^3$

a. Write the given polynomial in the standard form.

b. Complete the following table:

The leading coefficient is	The constant term is	The coefficient of x^2 is

Question2

Factor each of the following trinomial

a) $x^2 - 10x - 24$

b) $51x^2 - 5x - 4$

Question3

Factor completely

a) $x^6 + 63x^3 - 64$

b) $6x(3x + 1)^3 - (3x + 1)^4$

Question4

Factor by grouping

a) $9x^2 + 3x - y - y^2$

b) $36x^2 - y^2 - 4yz - 4z^2$

Question5

Find all positive values of k such that $4x^2 - 12xy + ky^2$ is a perfect-square trinomial.