

KING FAHD UNIVERSITY OF PETROLUUM AND MINERALS

Math 001— Term 061

Quiz#4

Name:

ID#:

Sec#:

Sr#:

Q1: Find the solution set for the equation:

$$\frac{5}{x-3} - \frac{3}{x-2} = \frac{4}{x-3}, \quad x \neq 2, x \neq 3$$

Solution:

$$\frac{5}{x-3} - \frac{3}{x-2} = \frac{4}{x-3}$$

$$\frac{5}{x-3} - \frac{4}{x-3} = \frac{3}{x-2}$$

$$\frac{1}{x-3} = \frac{3}{x-2}$$

$$3x - 9 = x - 2$$

$$2x = 7$$

$$x = \frac{7}{2}$$

Q2: Solve $\frac{x}{y} = \frac{3}{y+1}$ for x

Solution:

$$\frac{x}{y} = \frac{3}{y+1}$$

$$x(y+1) = 3y$$

$$x = \frac{3y}{y+1}$$