MTH-4106-1 Factoring and Algebraic Fractions

Name:

Date:

Quiz#9

Express the sums of the following algebraic fractions in lowest terms. Show all the steps in the solutions. (30 marks)

1. 
$$\frac{1}{3-x} + \frac{x-2}{x(x-5)}$$

$$2. \quad \frac{m^2}{2m^2 + m} + \frac{1 - m}{2m}$$

$$3. \quad \frac{-b^2 - b + 6}{b^2 + 3b} + \frac{b}{b+2}$$

Express the differences of the following algebraic fractions in lowest terms. Show all the steps in the solutions. (20 marks)

4. 
$$\frac{4n^2}{n^3} - \frac{2n-n^2}{n-2}$$

$$5. \quad \frac{4}{x+2} - \frac{x+2}{x}$$