

MTH-4106-1
Factoring and Algebraic Fractions

Name:

Date:

Quiz # 8

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

1.
$$\frac{16 - q^2}{q} \times \frac{4q - 12}{-16q - 4q^2}$$

2.
$$\frac{4b^2 - 4b + 1}{b - 6} \times \frac{b^2 - 10b + 24}{2b^2 - 9b + 4}$$

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

$$3. \frac{4 - x^2y^2}{x^2y^2 + 4} \div (x^2y^2z^2 - 4z^2)$$

$$4. \frac{16 - x^2}{x - 4} \div \frac{x^2 - x - 20}{x - 5}$$