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Mathematics, Science and Computer Department



INTENSIVE MATHEMATICS (PBM1035) Session December 2017 MODEL EXAM PAPER (QUESTION 2)

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working. You may use a non-programmable scientific calculator.

Question 1

Simplify the following expressions into the lowest form.

(a)
$$\frac{3mn}{2mn^2} \times \frac{4n}{8n^2}$$

(b)
$$-3x(x+2) - (2x-5)$$

Question 2

Factorize the given expressions completely. (a) $\frac{12x-24}{x^2-x-2}$ (b) $3x^2+7x+2$

(a)
$$\frac{12x-24}{x^2-x-2}$$

(b)
$$3x^2 + 7x + 2$$

Question 3

Simplify the following expression.

$$\frac{3b^3+b}{2b} \div \frac{3b}{2}$$