

INTENSIVE MATHEMATICS (PBM1035)

Session December 2017

SELF-EXERCISE 5

Instructions

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

1. Solve each problem.

- $(8 \times 10^3) \times (3.5 \times 10^3)$
- $(4.5 \times 10^0) \div (3 \times 10^1)$
- $(8 \times 10^1) \times (6 \times 10^5)$
- $(2.5 \times 10^1) \div (2.5 \times 10^1)$
- $(5 \times 10^{-2}) \div (1 \times 10^2)$
- $(3 \times 10^{-6}) \times (5 \times 10^4)$
- $(5 \times 10^{-2}) \div (5 \times 10^1)$
- $(1.5 \times 10^{-5}) \div (3 \times 10^6)$
- $(1.5 \times 10^4) \div (1 \times 10^6)$
- $(9 \times 10^8) \div (3 \times 10^{-7})$

2. Solve the following questions based on BODMAS rule.

- $(9 + 43 - 4) \div 24 - 4$
- $(16 - 2) + (7 - 8 \div 2)$
- $(10 + 26 - 6) \div 10 - 2$
- $(9 + 44 - 5) \div (9 - 7)$
- $(8 + 3) + (8 + 16 \div 4)$
- $(8 + 46 - 6) \div (1 + 3)$
- $9 \times (4 \times 10 - 4) + 5$
- $3 \times (9 \times 3 + 9) - 4$
- $(17 + 5) \times (12 + 2) + 5$

3. Find the percentage of increase/decrease for each of the following.

Original number	New number	Percentage change	Increase/Decrease
40	90		
60	70		
95	20		
150	140		
110	125		
165	140		
155	80		
170	200		