

**NEW DISCOVERING MATHEMATICS
SECONDARY 1 (GRADE 7)
NON-CALCULATOR PRACTICE**

Name: _____ () Class: _____ Date: _____

Chapter 1 – Factors and Multiples (Worksheet B)

- 1 Determine whether each of the following numbers is a prime or composite number.
 - (a) 37
 - (b) 43
 - (c) 51
 - (d) 67

- 2 Express the following numbers as a product of their prime factors in index notation.
 - (a) 56
 - (b) 69
 - (c) 212

- 3 Find the highest common factor of the following sets of numbers.
Express your answers in index notation.
 - (a) 42 and 66
 - (b) 60 and 150
 - (c) 32, 48 and 80

- 4 Find the lowest common multiple of the following sets of numbers.
Express your answers in index notation.
 - (a) 15 and 25
 - (b) 33 and 63
 - (c) 12, 26 and 28

- 5 Using prime factorisation, find the value of
 - (a) $\sqrt{8100}$
 - (b) $\sqrt[3]{512}$

- 6
 - (a) Express 735 as a product of its prime factors.
 - (b) Given that $735k$ is a perfect square, find the smallest integer value of k .

- 7 Find the smallest number that can be divided by all integers from 5 to 10.
- 8 The product of 3 consecutive integers is 720, find the smallest number.
- 9 Flight *A* goes to city *M* every 6 days.
Flight *B* goes to city *M* every 9 days.
Flight *C* goes to city *M* every 12 days.
If all three flights are at city *M* on 14th June, find the next date that all three flights will be at city *M* again.
- 10 Mabel has 2520 toy cubes.
- (a) Would it be possible for Mabel to construct a larger cube from the 2520 toy cubes? Explain your answer.
- (b) Mabel forms a cuboid with the 2520 toy cubes. Determine the possible dimensions of the cuboid such that each side has at least 10 cubes.