Master Maths 8 Worksheet 3
Factors and Multiples

3

Name: _____

1. Write ***all*** the factors of the following numbers.

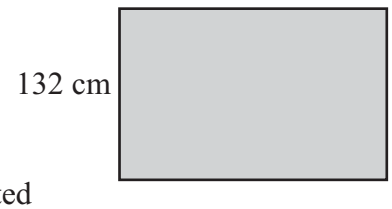
(a) 16

(b) 72

2. Find the highest common factor for the following pairs of numbers.

(a) 15, 27 (b) 36, 48 (c) 36, 60

3. Clara had a rectangular sheet of board that she wanted to divide in squares. The sheet of board is 180 cm long and 132 cm wide. She wanted the squares to be as large as possible with no board wasted.



(a) What is the side length of each of the squares so there is no wastage?

(b) How many of these squares could Clara cut out of the board?

4. Circle the numbers below that are ***prime numbers***.

135 27 87 171 157 89 53 51

5. Complete the factor tree for 1512 and write the factors as products of its prime factors in index form.

1512

6. Find the lowest common multiple of the following groups of numbers.

(a) 8, 10 (b) 10, 12 (c) 3, 5, 8

7. A brick layer had different types bricks.

Small bricks - 4 cm thick
Standard bricks - 6 cm thick
Large bricks - 10 cm thick

(a) If he stacked the ***small*** bricks on top of each other and ***standard*** bricks on top of each other, what is the least number of each for the stacks to be the same height?

Small

Standard

(b) If he stacked the ***small*** bricks on top of each other, the ***standard*** bricks on top of each other and the ***large*** bricks on top of each other, what is the least number of each for the three stacks to be the same height?

Small

Standard

Large