Level 3 Types of Numbers Answer the following questions, showing all your working. No calculator allowed.

- 1. Calculate (a) $8 3 \times 2$ (b) $4 + 2 \times 3^2$
- 2. Calculate the area and perimeter of the rectangle below, with length 12cm and breadth 5cm.



- 3. Create a shape with rotational symmetry of order 4.
- 4. Write down the first 10 square numbers.
- 5. The temperature one day rose from $-15^{\circ}C$ to $12^{\circ}C$. By how much had it risen?
- 6. Excluding zero, list the first 6 multiples of:-(a) 6 (b) 8 (c) 11 (d) 20
- 7. Find the l.c.m of each of the following sets of numbers.
 (a) 6 and 2
 (b) 7 and 9
 (c) 3, 5 and 10
- 8. Find the h.c.f for each of the following:(a) 24 and 36
 (b) 13 and 26
 (c) 12 and 42
- 9. There is only one number which is both a multiple and a factor of 12. What is the number?
- 10. List all the prime numbers between 50 and 100.
- 11. List each of the following numbers as a product of primes:-(Hint:- construct a "Prime factor tree")
 - (a) 36 (b) 64 (c) 98