

**FOUNDATION TIER
MINI PRACTICE EXAM 2**

**NON-CALCULATOR
20 MINUTES ALLOWED**



- 1.
- (a) Simplify fully $3a \times 4b$ (1)
- (b) Expand $2x(x + 3)$ (1)
- (c) Factorise fully $8y - 12$ (1)
- 2.
- (a) Solve $x - 2 < 5$ (1)
- (b) Solve $2x + 3 > 10$ (1)
- (c) Hence write down all integers that satisfy the inequalities $x - 2 < 5$ and $2x + 3 > 10$ (2)
- 3.
- There are blue marbles and green marbles in a bag.
The ratio of blue marbles to green marbles is 3 : 7.
- (a) If a marble is picked at random from the bag, what is the probability that it is blue? (1)
- (b) There are 49 green marbles in the bag. How many marbles are in the bag altogether? (2)

4.

(a) Work out the n th term of the sequence 7, 11, 15, 19, 23, ...

(1)

(b) Use your n th term formula to work out the 70th term in the sequence

(2)

(c) Is 95 in the sequence? Explain your answer.

(3)

5.

There are 120 students in Year 9.

They all either have packed lunches or school lunches, and study either French or Spanish.

$\frac{3}{5}$ of the students study French.

22 of the students that study Spanish have school lunches.

75% of the students that study French have packed lunches.

Complete the two-way table below.

	School lunches	Packed lunches	Total
Spanish			
French			
Total			120

(4)