



Problem of the Week

Problem B

Planes in Formations

At an airshow, a World War II Lancaster bomber flies in formation with four Spitfire fighter planes, as shown in the picture on the left below. On the second pass, two Lancaster bombers fly in formation with six Spitfires, as shown in the picture on the right below.



- a) If there were more Lancasters, the pattern would continue. Therefore, there would be 3 Lancasters and 8 Spitfires in the next formation. Draw this formation and the next two formations and fill in the remainder of Table 1.
Suggestion: Use a small symbol to represent each of the two planes for easy drawing.

Lancasters	Spitfires
1	4
2	6
3	
4	
5	

Table 1

- b) What if the Spitfires change their formations in two different ways, as shown in Tables 2 and 3? Fill in the remainder of each table, and then draw a possible formation to match each pattern.

Lancasters	Spitfires
1	6
2	10
3	14
4	
5	

Table 2

Lancasters	Spitfires
1	6
2	8
3	10
4	
5	

Table 3

- c) Draw another formation which follows a new pattern, and make a table of values for your pattern.

STRAND PATTERNING AND ALGEBRA

