Splitting Beans

NAME_____

1. Complete the table below. For the last row, make up your own problem to fit the pattern.

Number of Beans	Group Size	Number of Whole Groups	Number Left Over	Fraction of Group Left Over	Quotient with Calculator
25	3				
25	4				
25	6				
25					

2. Compare your results in Question 1.

(a) Why are the fractions different when the number of beans leftover is the same?

(b) Why are the decimal parts of the answers different?

3. Complete the table below. For the last row, make up your own problem so that six beans are leftover.

Number of Beans	Group Size	Number of Whole Groups	Number Left Over	Fraction of Group Left Over	Quotient with Calculator
11	3				
19	8				
27	10				
23	5				
25	7				
			6		

4. How are the fractions in Question 3 different from the fractions in Question 1?

5. Complete the table below. For the last row, make up your own problem to fit the pattern.

Number of Beans	Group Size	Number of Whole Groups	Number Left Over	Fraction of Group Left Over	Quotient with Calculator
16	6				
40	15				
24	9				

6. In Question 5, why are the quotients with the calculator the same, even though the numbers of beans leftover are different?

Extend Your Thinking. A decimal that ends is called a *terminating decimal*. How can you predict whether the calculator's answer will terminate? (Hint: It has to do with group size.)