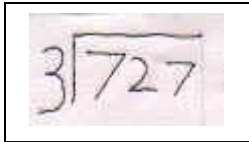


Partial Quotients Strategy for Division

The following is an example that shows how to solve division with Partial Quotients for the problem $727 \div 3$.

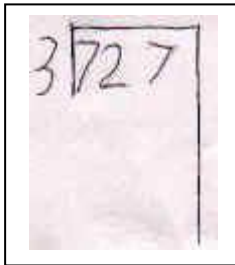
I have 727 cookies that I want to put into 3 bags.

1. First write the problem.



A handwritten division problem showing 3 on the left, a vertical line, and 727 on the right.

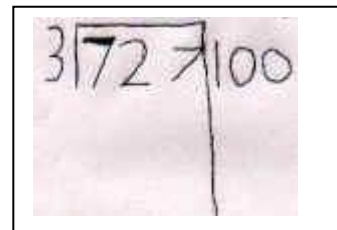
2. Draw a line down the side.



The handwritten division problem from step 1, but with a vertical line drawn down the right side of the numbers 727.

3. Beginning with multiples of 10, estimate how many times 3 goes into 727 without going over.
*(How many cookies do I **THINK** I can put into each bag?)*

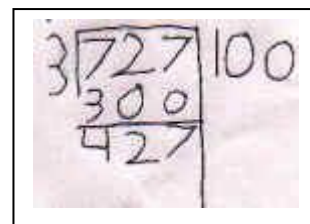
4. Write the number of times that you multiply 3 to the side of the line down the right side of the problem.



The handwritten division problem with a vertical line, and the number 100 written to the right of the line.

5. Multiply 3×100 and subtract that from 727.

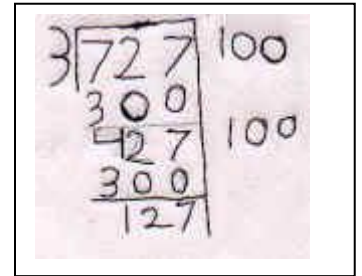
(If I put 100 cookies into each bag, how many cookies have I shared out already?(300) How many do I have left?(427))



The handwritten division problem with a vertical line, 100 written to the right, and 300 written below 727 with a horizontal line underneath. Below 300 is the number 427.

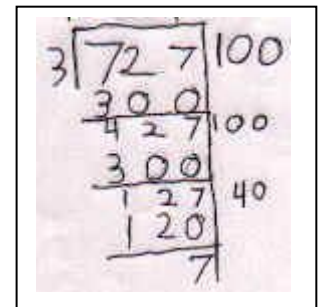
6. Again beginning with multiples of 10, estimate how many times you can divide 427 by 3.
(If I have 427 cookies left, how many do I THINK I can put into each bag?)

7. Multiply 3 X 100 and subtract that from 427.
(I had 427 left; I put 100 in each bag; I've shared out another 300; I now have 127 left)



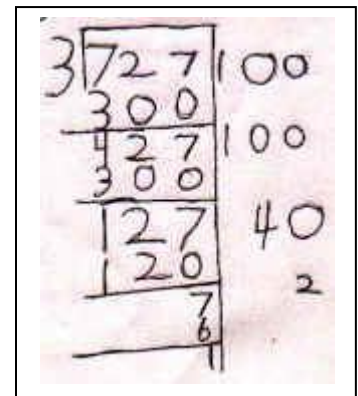
8. Again beginning with multiples of 10, estimate how many times you can divide 127 by 3.
(If I have 127 cookies left, how many do I THINK I can put into each bag? I can't do 100 in each this time!)

9. Multiply 3 X 40 and subtract that from 127.
(I have 7 cookies left.)



10. Estimate how many times you can divide 7 by 3.
(I have 7 cookies left- how many can I put into each bag?)

11. Multiply 3 X 2 and subtract that from 7.
(I put 2 in each bag; I've shared out 6; I have 1 left. No more sharing!)



12. Add all the numbers along the right side which should be $100 + 100 + 40 + 2$.

(I first put 100 in each bag; then another 100; then 40, then 2- I've put 242 in each bag!)

13. Write that number down below the right side line (or above the 727)

3	727	100
	300	
	427	100
	300	
	127	40
	20	
	7	2
	1	
		242

14. Since there is still 1 remaining on the left side, your answer should be 242 with a remainder of 1.

242 R1