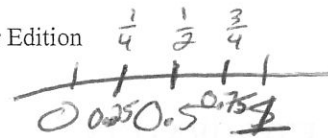


2nd



Name _____

****TASK: Where Does the Decimal Go? – Using Estimation When Dividing Decimals**

Consider the number sentence $146 \div 7 = 20857$, is it true? If not use what you know about estimation to determine the correct placement of the decimal point. Justify your solution. The task is to use only this information and estimation to give a fairly precise answer to each of the following: Be sure to justify each of your solutions.

Problem	Solution	Reasoning
$146 \div 0.7$ ☆	20857	$0.7 \approx 0.5$ $146 \div 0.5$ means how many $\frac{1}{2}$'s are in 146? wholes 1 146 halves 2 292 answer should be close to 192 20.857 ; 2085.7
$1.46 \div 7$ $1.5 \div 5 = 0.3$ ☆	0.20857	2.0857 20.857
$14.6 \div 0.7$	20857	Reasoning
$1460 \div 70$	20857	Reasoning

EXPLORATION

Compute the following product: $35 \times 37 = 1295$

Using only the result of this computation and estimation, give the exact answer to each of the following: For each computation write a rationale for how you made the placement of the decimal point in each answer. When you have finished, you make check your results with a partner. Acknowledge any errors you may have made and adjust your rationale to correct the error.

Problem	Solution	Reasoning
0.35×3.7	1.295	$0.35 \approx 0.5$ $3.7 \approx 4$ $0.5 \times 4 = 2$ If the decimal were here: 0.1295, too small If it were here: 12.95, too large
35×0.37	1295	
3.5×37	1295	
0.35×0.37	1.295	