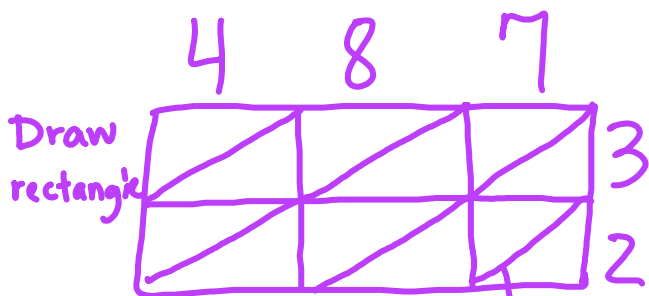


4-1 + 4-3 Multiplying Decimals

*Use lattice

Ex 487×32

Estimate $500 \times 30 = 15,000$

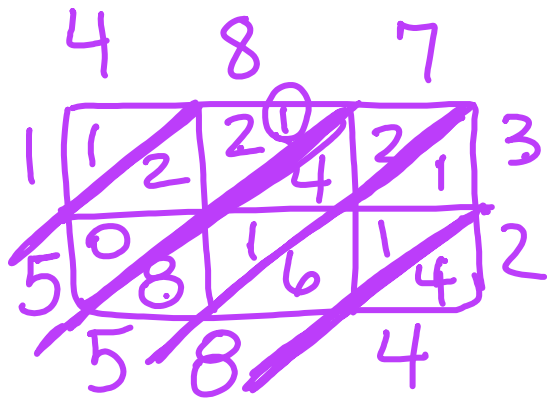


← write longest # (most digits)

← shortest # (least digits)

make a box for each #

draw diagonal lines for each box from corner to corner



15,584

* Mult. each top # by each side #. Place 2-digit answer in box

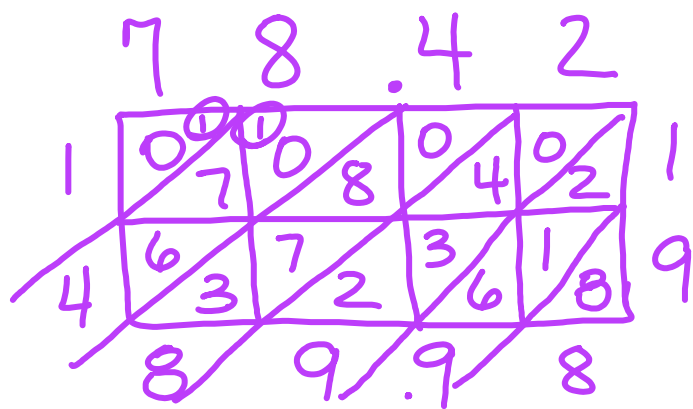
* Add from right to left. Carry #s to next diagonal as needed. (circle)

* Answer on left + bottom

* Check using estimate

$$\textcircled{1} \quad 19 \times 78.42$$

$$\text{Est. } 20 \times 80 = 1600$$



* Count # of dec. places in factors then move that many places to left in product

$$\textcircled{2} \quad 3.\underline{0}\underline{8} \times 73$$

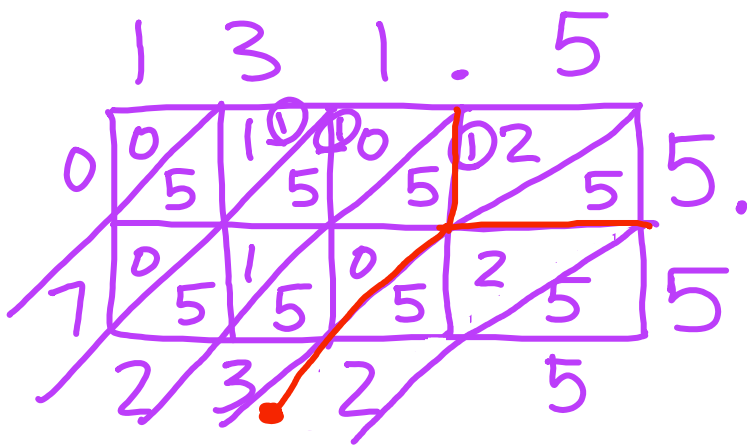
$$\text{Est. } 3 \times 70 = 210$$

	3	.	0	8	
2	2	1	0	5	7
2	0	9	0	2	4
	4	8	4		

$$22484 = \boxed{224.84}$$

③ $131.\underline{5} \times 5.\underline{5}$

Est. $130 \times 6 = 780$



You could try this...

To find dec. in product: go where they meet and "ride" the slide down

$072325 = \boxed{723.25}$

④ $52.\underline{8} \times 13.\underline{6}$

Est. $50 \times 13 = 650$

	5	2	.	8	
0	0	0	0	0	1
7	5	2	0	8	3.
1	3	1	4	8	6
8	0	0	8		

$71808 = \boxed{718.08}$