Steps to Success for Box Array/Area Model Div.

1. Draw a rectangle.

2. Write the divisor to the left side of the rectangle and the dividend inside the rectangle close to the left side.

3. Think in multiplies of 10, 100, or 1,000 times the divisor.
   - Write this answer above rectangle of the dividend
   - Write the product of the divisor times the number above below the dividend inside the rectangle

4. Subtract the dividend and the product.

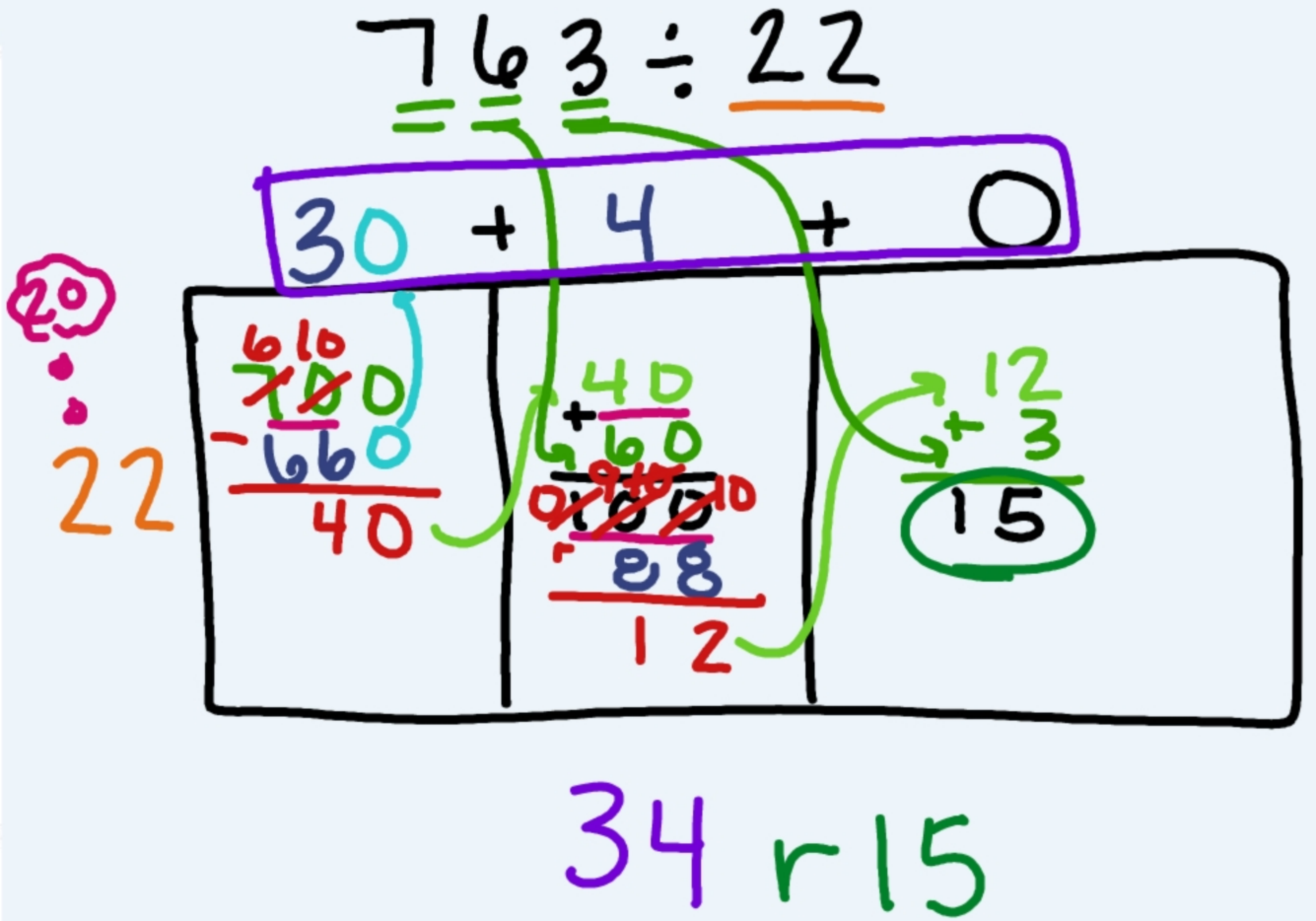
5. Add an addition sign above with the multiple and draw a line down in the rectangle.

6. Bring the difference from step 4 to the right of the newly formed line.

7. Repeat steps 3-6 until you subtract and get a remainder less than the divisor or a zero.

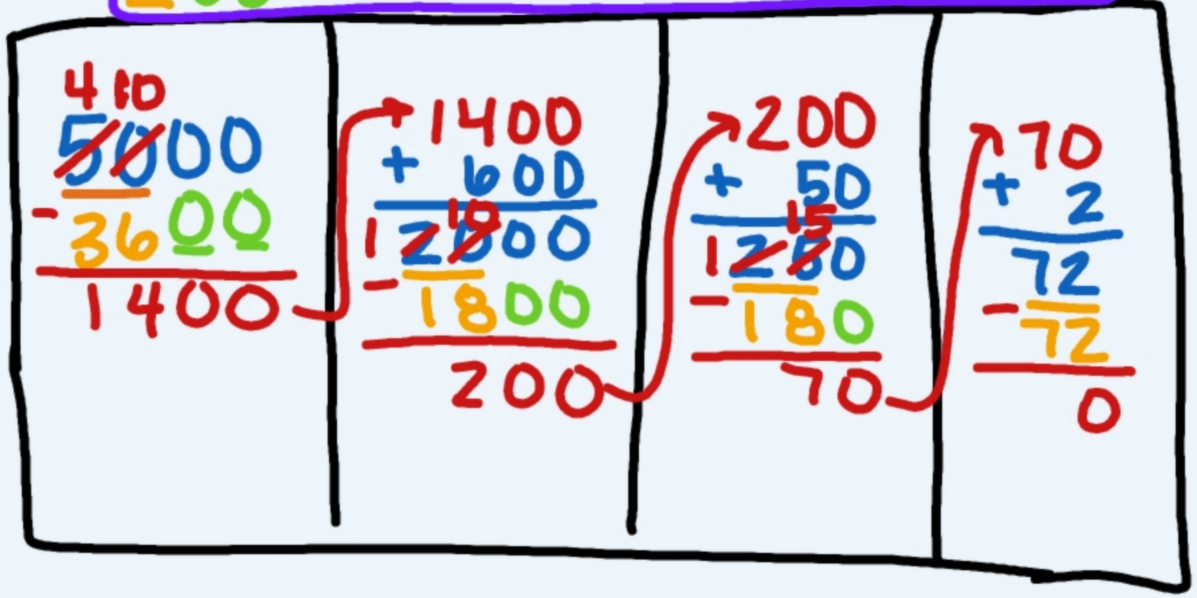
8. Add all of the multiples above the rectangle to determine your quotient

9. Check
   - Is my quotient in place value above the dividend?
   - Does my answer make sense (remainder less than the divisor?)
   - Multiply the quotient by the divisor and add remainder to product 34 x 22 + 15 = 763

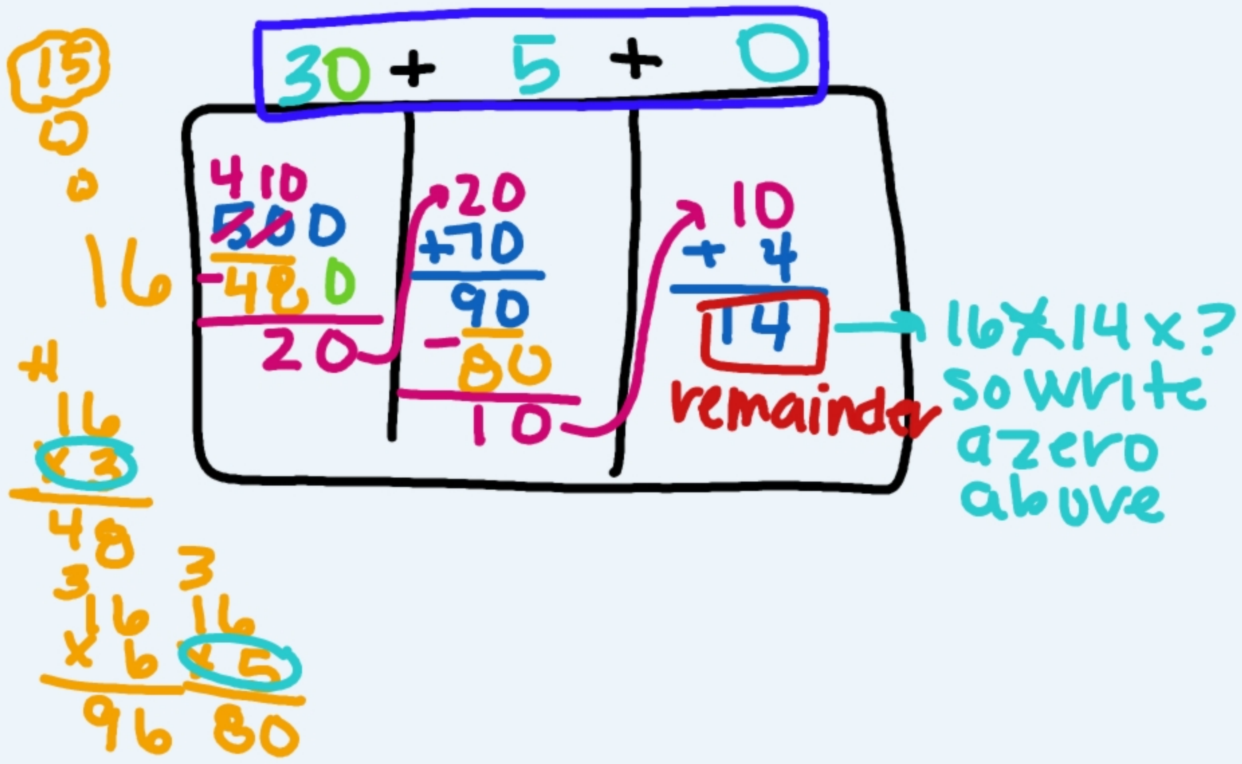


5652 ÷ 18 = 314

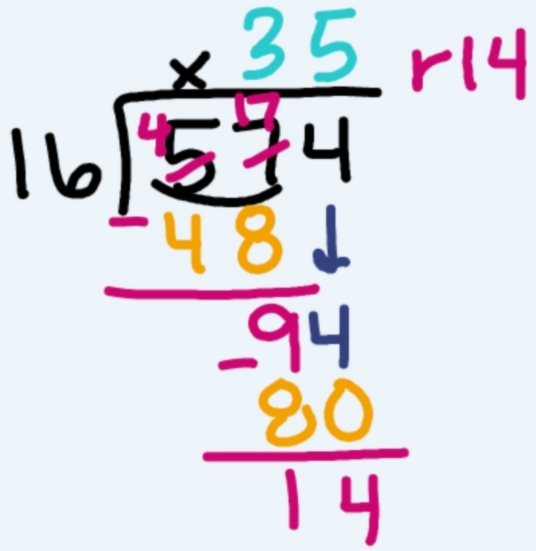
200 + 100 + 10 + 4 add to find quotient



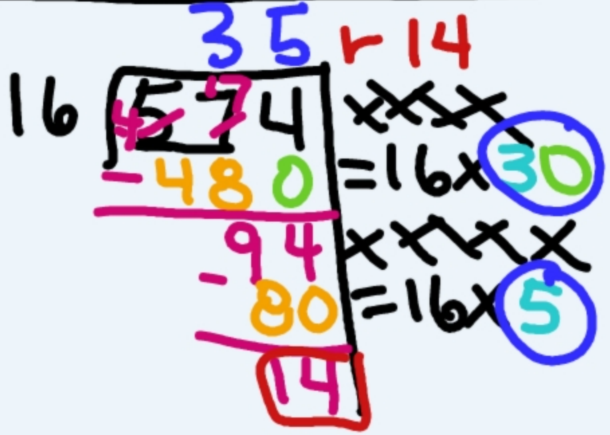
574 ÷ 16 = 35 r14



Standard



Partial Quotients



Standard

$$\begin{array}{r} 53 \text{ r } 3 \\ 13\overline{)692} \\ -65\downarrow \\ \hline 42 \\ -39 \\ \hline 3 \end{array}$$

2
13
×7
91

1
13
×6
78

1
13
×5
65

1
13
×4
52

13
×3
39

Partial Quotients

$$\begin{array}{r} 53 \text{ r } 3 \\ 13\overline{)692} \\ -650 \quad = 13\times 50 \\ \hline 42 \\ -39 \quad = 13\times 3 \\ \hline 3 \end{array}$$

50 + 3

Area Model

$692 \div 13 = 53$ r 3

40 + 10 + 3

13	520 (40)	130 (10)	39 (3)
	80	40	3

520 + 130 + 39 = 689

80 + 40 + 3 = 123