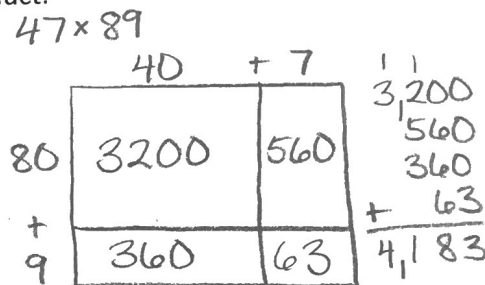
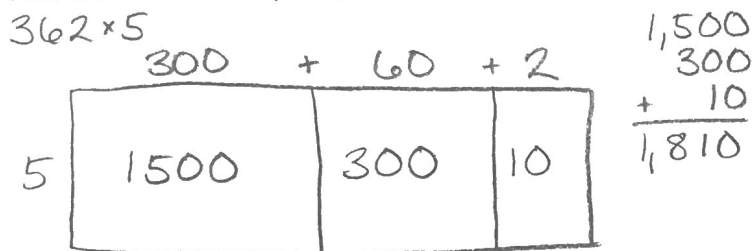


## Unit 3 Review Sheet

### Multiplication: Area Model

- \*Decompose the factors by their place values.
- \*Start in the ones place.
- \*Find the area of each piece, then add them together to find the total product.



### Multiplication: Partial Products

- \*Start in the ones place.
- \*Think of the bottom number first.
- \*Record the expressions next to their answers.

$$\begin{array}{r} 362 \\ \times 5 \\ \hline 10 \text{ (5} \times 2\text{)} \\ 300 \text{ (5} \times 60\text{)} \\ + 1500 \text{ (5} \times 300\text{)} \\ \hline 1,810 \end{array}$$

$$\begin{array}{r} 47 \\ \times 89 \\ \hline 63 \text{ (9} \times 7\text{)} \\ 360 \text{ (9} \times 40\text{)} \\ 560 \text{ (80} \times 7\text{)} \\ + 3200 \text{ (80} \times 40\text{)} \\ \hline 4,183 \end{array}$$

### Division: Place Value Chart

- \*Represent the dividend & draw the number of groups equal to the divisor.
- \*Start in the highest place value and equally distribute what's in the place value to the groups.
- \*Unbundle/regroup any remaining into the next place value.
- \*The quotient is the amount in one group. Any remaining ones are the remainder.

$$5,1678 \div 3 = 1,892 \text{ r } 2$$

	Thou.	Hun.	Tens	Ones	
	5 - 3 <u>2</u>	6 20 - 24 <u>2</u>	7 20 - 27 <u>0</u>	8 - 6 <u>2</u>	
①	1	8	9	2	1,892
②	1	8	9	2	
③	1	8	9	2	

### Area & Perimeter Review:

- \*The formula for area is  $A = l \times w$ . Area is measured in square units.
- \*The formula for perimeter is  $P = (2 \times l) + (2 \times w)$ . Perimeter is measured in units.
- \*Sometimes the missing information is one of the side lengths, which are measured in units.