

Multiply across zeros

Name: _____

$$\begin{array}{r}
 407 \\
 \times 4 \\
 \hline
 \end{array}
 \quad \text{Estimate: Not the real answer} \\
 4 \quad \times \quad = 1,600$$

Distributive Property

$$4 \times 407 = (\quad \times \quad) + (\quad \times \quad) \\
 = (\quad) + (\quad)$$

real answer =

$$\begin{array}{|c|} \hline
 \text{final product} \\ \hline
 \end{array}$$

Partial Products

$$\begin{array}{r}
 407 \\
 \times 4 \\
 \hline
 \end{array}
 \quad \begin{array}{|c|c|c|c|} \hline
 & & & \\ \hline
 & & & \\ \hline
 0 & & & \\ \hline
 \end{array}$$

$+ \quad \quad \quad \quad$
 \hline
 $\quad \quad \quad \quad$

Multiply with regrouping

$$\begin{array}{r}
 + \quad \quad \quad \quad \\
 2,204 \\
 \times \quad \quad \quad \quad 3 \\
 \hline
 \end{array}$$

Challenge question

$$3 \times 1,203 = \underline{\quad \quad \quad}$$

Estimate: Not the real answer

$$3 \times \underline{\quad \quad \quad} = 3,600$$

Distributive Property

$$3 \times 1,203 = (3 \times \quad) + (3 \times 200) + (3 \times \quad) \\
 = (\quad) + (\quad) + (\quad)$$

real answer =

$$\begin{array}{|c|} \hline
 \text{final product} \\ \hline
 \end{array}$$

$$\begin{array}{r}
 + \quad \quad \quad \quad \\
 1,105 \\
 \times \quad \quad \quad \quad 5 \\
 \hline
 \end{array}$$

Problem Solving

Neima School is collecting money to donate to a charity.

AED 105 is collected each month.

How much money is collected in 7 months?

Use the distributive property

$$\begin{array}{r}
 7 \times 105 = (\quad \times \quad) + (\quad \times \quad) \\
 = (\quad) + (\quad) \\
 = \quad \quad \quad \quad \\
 \text{final product}
 \end{array}$$