Multiplying Greater Numbers

Find 128 × 23.   Estimate: 100 × 20 = 2,000

	Step 1 Multiply by the ones. Regroup as needed.	**Step 2** Multiply by the tens. Regroup as needed.	**Step 3** Add the products.

$$
\begin{array}{r}
128 \\
\times\ \ 23 \\
\hline
\overset{1}{384} \\
+\ 2,560 \\
\hline
2,944
\end{array}
\qquad
\begin{array}{r}
\overset{2}{128} \\
\times\ \ \ 3 \\
\hline
384
\end{array}
\qquad
\begin{array}{r}
\overset{1}{128} \\
\times\ \ 20 \\
\hline
2,560
\end{array}
$$

Because the answer is close to the estimate, the answer is reasonable.

Find the product. Estimate to check if your answer is reasonable.

Problem	Multiply by the Ones	Multiply by the Tens	Add the Products
1. $\begin{array}{r} 282 \\ \times\ \ 19 \\ \hline 2,538 \\ +\ \underline{} \\ \end{array}$	$\begin{array}{r} \overset{7\,1}{282} \\ \times\ \ \ 9 \\ \hline 2,538 \end{array}$	$\begin{array}{r} 282 \\ \times\ \ 10 \\ \hline \end{array}$	
2. $\begin{array}{r} 538 \\ \times\ \ 46 \\ \hline \end{array}$			

3. Is 2,750 a reasonable answer for 917 × 33? Explain.

_____

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_____

Multiplying Greater Numbers

Find each product. Estimate to check that your
answer is reasonable.

1. 556 $\times\ 34$	**2.** 234 $\times\ 75$	**3.** 395 $\times\ 76$	**4.** 483 $\times\ 57$

5. 628 $\times\ 33$	**6.** 154 $\times\ 35$	**7.** 643 $\times\ 49$	**8.** 536 $\times\ 94$

9. In a class of 24 students, 13 students sold over 150 raffle tickets each, and the rest of the class sold about 60 raffle tickets each. The class goal was to sell 2,000 tickets. Did they reach their goal? Explain.

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10. Player A's longest home run distance is 484 ft. If Player A hits 45 home runs at his longest distance, what would the total distance be? ___

11. Player B's longest home run distance is 500 ft. There are 5,280 ft in 1 mi. How many home runs would Player B need to hit at his longest distance for the total to be greater than 1 mi? ___

12. Which equation shows how you can find the number of minutes in one year?

A $60 \times 24 \times 365$
B $60 \times 60 \times 24$
C 60×365
D $60 \times 60 \times 365$

13. Write a real-world problem where you would have to multiply 120 and 75.

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