Multiply Whole Numbers and Decimals

Multiply. \(5 \times 6.17 = n\)

Step 1: Estimate by rounding the decimal to the nearest whole number.
\(5 \times 6 = 30\)
Your answer should be around $30.

Step 2: Multiply as if you were multiplying whole numbers.
Ignore the decimal point and the $ for now.

\[
\begin{align*}
6.17 & \quad \times \quad 5 \\
\hline
3085
\end{align*}
\]

Step 3: Count the number of decimal places in each factor. Then find the total of decimal places.

\[
\begin{align*}
$6.17 & \quad \rightarrow \quad 2 \text{ decimal places} \\
5 & \quad \rightarrow \quad 0 \text{ decimal places} \\
30.85 & \quad \rightarrow \quad 2 \text{ decimal places}
\end{align*}
\]
Place the decimal point in the product so that the product has the total number of decimal places.

Step 4: Compare the answer with the estimate. $30.85 is around $30.00. So $30.85 is reasonable.

Find each product.

1. \(7 \times 1.9\)  
2. \(3.8 \times 6\)  
3. \(4.1 \times 6\)  
4. \(4 \times 4.5\)  

5. \(0.64 \times 7\)  
6. \(9 \times 0.42\)  
7. \(6 \times 0.73\)  
8. \(0.62 \times 8\)  

9. \(4 \times 6.48\)  
10. \(1.14 \times 9\)  
11. \(8 \times 21.3\)  
12. \(5 \times 18.6\)  

13. \(7 \times 6.179\)  
14. \(16 \times 0.35\)  
15. \(4.2 \times 25\)  
16. \(3.96 \times 12\)