

Boost Free Lessons - Year 5 Maths

Lesson 6: Multiplying by a One-Digit Number

Name: _____ Grade: _____ Date: _____

Worked Example 1

Work out 428×6 .

$$\begin{array}{r}
 \begin{array}{ccc}
 & \textcolor{red}{1} & \textcolor{red}{4} \\
 4 & 2 & 8 \\
 \times & & 6 \\
 \hline
 \textcolor{red}{2} & \textcolor{red}{5} & \textcolor{red}{6} & \textcolor{red}{8}
 \end{array}
 \end{array}$$

1. Set it out with the single digit underneath the ones column.
2. **Ones:** $6 \times 8 = 48$. Write the 8 and carry the 4.
3. **Tens:** $6 \times 2 = 12$, plus the 4 carried = 16. Write the 6 and carry the 1.
4. **Hundreds:** $6 \times 4 = 24$, plus the 1 carried = 25. Write 25.

$428 \times 6 = 2\,568$

Worked Example 2

Use the distributive property to work out 7×34 in your head.

1. Split the larger number into parts that are easy to multiply.
2. $34 = 30 + 4$.
3. $7 \times 30 = 210$ and $7 \times 4 = 28$.
4. Add the two parts: $210 + 28 = 238$.

$7 \times 34 = 238$

Remember: Start at the **ones** and carry into the next column. For mental work, **split** the larger number into tens and ones, multiply each part, then add.



Question 1: Work out the following.

1. 36×4

2. 58×7

3. 124×3

4. 247×5

5. 306×8

6. 419×6

7. 525×9

8. 738×4



Question 2: Answer the following.

1. Use splitting to work out 6×43 .
2. Use splitting to work out 8×52 .
3. Work out $1\,246 \times 5$.
4. Estimate 384×7 by rounding to the nearest hundred.
5. Work out 9×407 .
6. Is 250×4 the same as 500×2 ? Explain.



Question 3: Answer the following questions.

1. A box holds 24 pencils. How many pencils in 7 boxes?

2. A bus carries 48 passengers. How many passengers in 6 full buses?

3. Tickets cost \$35 each. What is the cost of 8 tickets?

4. A farmer plants 165 trees in each of 4 rows. How many trees altogether?

5. Estimate first, then work out 296×5 . Was your estimate close?





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Answers: Multiplying by a One-Digit Number**Question 1**

1. 144
2. 406
3. 372
4. 1 235
5. 2 448
6. 2 514
7. 4 725
8. 2 952

Question 2

1. $6 \times 40 + 6 \times 3 = 258$
2. $8 \times 50 + 8 \times 2 = 416$
3. 6 230
4. 2 800
5. 3 663
6. Yes, both equal 1 000. Halving one number and doubling the other keeps the product the same.

Question 3

1. 168 pencils
2. 288 passengers
3. \$280
4. 660 trees
5. Estimate 1 500; exact answer 1 480, so the estimate was close.

