

Grade 4 Multiplying and Dividing Workbook

6 lessons · printable · answer key at the back

Name _____

Date _____

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Multiplying Two Digits by One

WORKED EXAMPLE

$$\begin{array}{r} 11 \\ \times 3 \\ \hline 33 \end{array}$$

1. Multiply multi-digit numbers

Multiply. Show your working.

$$\begin{array}{r} 1 \quad 34 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 71 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 77 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 13 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 11 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 80 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 85 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 15 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 78 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 56 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 91 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 49 \\ \times 2 \\ \hline \end{array}$$

Multiplying Three Digits by One

WORKED EXAMPLE

$$\begin{array}{r} 198 \\ \times 8 \\ \hline 1584 \end{array}$$

2. Multiply multi-digit numbers

Multiply. Show your working.

$$\begin{array}{r} 1 \quad 719 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 395 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 760 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 104 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 586 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 157 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 219 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 497 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 537 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 10 \quad 903 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \quad 573 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 892 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \quad 391 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \quad 433 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 328 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 16 \quad 807 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 17 \quad 113 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \quad 730 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 19 \quad 274 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 20 \quad 225 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \quad 287 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 22 \quad 744 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \quad 908 \\ \times 3 \\ \hline \end{array}$$

Multiplying Two Digits by Two

WORKED EXAMPLE

$$\begin{array}{r}
 47 \\
 \times 32 \\
 \hline
 94 \\
 1410 \\
 \hline
 1504
 \end{array}$$

3. Multiply multi-digit numbers

Multiply. Show your working.

$$\begin{array}{r}
 1 \quad 11 \\
 \times 99 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 2 \quad 30 \\
 \times 61 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 3 \quad 56 \\
 \times 18 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 4 \quad 95 \\
 \times 99 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 5 \quad 34 \\
 \times 43 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 6 \quad 42 \\
 \times 61 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 7 \quad 29 \\
 \times 11 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 8 \quad 18 \\
 \times 14 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 9 \quad 67 \\
 \times 36 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 10 \quad 60 \\
 \times 83 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 11 \quad 40 \\
 \times 38 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 12 \quad 35 \\
 \times 86 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 13 \quad 63 \\
 \times 21 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 14 \quad 98 \\
 \times 65 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 15 \quad 33 \\
 \times 40 \\
 \hline
 \end{array}$$

Division with Remainders

WORKED EXAMPLE

$$34 \div 4 = \underline{8} \text{ R } \underline{2}$$

4. Division with remainders

Divide. Write the quotient and the remainder.

- | | | |
|--|---|---|
| 1 $7 \div 3 = \underline{\quad} \text{ R } \underline{\quad}$ | 2 $50 \div 7 = \underline{\quad} \text{ R } \underline{\quad}$ | 3 $28 \div 5 = \underline{\quad} \text{ R } \underline{\quad}$ |
| 4 $67 \div 9 = \underline{\quad} \text{ R } \underline{\quad}$ | 5 $59 \div 5 = \underline{\quad} \text{ R } \underline{\quad}$ | 6 $13 \div 2 = \underline{\quad} \text{ R } \underline{\quad}$ |
| 7 $79 \div 7 = \underline{\quad} \text{ R } \underline{\quad}$ | 8 $22 \div 9 = \underline{\quad} \text{ R } \underline{\quad}$ | 9 $55 \div 6 = \underline{\quad} \text{ R } \underline{\quad}$ |
| 10 $115 \div 9 = \underline{\quad} \text{ R } \underline{\quad}$ | 11 $27 \div 5 = \underline{\quad} \text{ R } \underline{\quad}$ | 12 $61 \div 8 = \underline{\quad} \text{ R } \underline{\quad}$ |
| 13 $92 \div 8 = \underline{\quad} \text{ R } \underline{\quad}$ | 14 $17 \div 2 = \underline{\quad} \text{ R } \underline{\quad}$ | 15 $45 \div 7 = \underline{\quad} \text{ R } \underline{\quad}$ |
| 16 $106 \div 9 = \underline{\quad} \text{ R } \underline{\quad}$ | 17 $30 \div 8 = \underline{\quad} \text{ R } \underline{\quad}$ | 18 $49 \div 4 = \underline{\quad} \text{ R } \underline{\quad}$ |
| 19 $71 \div 9 = \underline{\quad} \text{ R } \underline{\quad}$ | | |

5. Word problems

Read each problem. Write the answer.

- 20 Marian packed 24 bread rolls into trays of 6.
How many trays did Marian fill?

- 21 Courtney shared 77 food pellets equally among 7 feed bags.
How many food pellets went in each feed bag?

- 22 Noah packed 20 tickets into shelves of 5.
How many shelves did Noah fill?

Long Division

WORKED EXAMPLE

$$\begin{array}{r} 31 \\ 4 \overline{)124} \\ \underline{12} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

6. Long division

Divide. Show your working.

$$\begin{array}{cccccc} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 \overline{)330} & 3 \overline{)411} & 8 \overline{)768} & 9 \overline{)279} & 7 \overline{)525} & 5 \overline{)925} \end{array}$$

$$\begin{array}{ccc} 7 & 8 & 9 \\ 5 \overline{)560} & 4 \overline{)260} & 3 \overline{)696} \end{array}$$

Long Division with Remainders

WORKED EXAMPLE

$$\begin{array}{r} 54 \\ 5 \overline{)274} \\ \underline{25} \\ 24 \\ \underline{20} \\ 4 \end{array}$$

7. Long division with remainders

Divide. Give the quotient and the remainder.

$$\begin{array}{l} 1 \quad \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \\ 7 \overline{)627} \quad 3 \overline{)404} \quad 7 \overline{)888} \quad 3 \overline{)545} \quad 5 \overline{)817} \quad 9 \overline{)438} \end{array}$$

$$\begin{array}{l} 7 \quad \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \quad \quad \underline{\quad} \text{ R } \underline{\quad} \\ 6 \overline{)799} \quad 8 \overline{)171} \quad 4 \overline{)725} \quad 9 \overline{)453} \end{array}$$

Answer Key (1 of 2)

Multiplying Two Digits by One

Multiply multi-digit numbers

1. $34 \times 3 = 102$
2. $71 \times 2 = 142$
3. $77 \times 3 = 231$
4. $13 \times 2 = 26$
5. $11 \times 6 = 66$
6. $80 \times 4 = 320$
7. $85 \times 2 = 170$
8. $15 \times 4 = 60$
9. $78 \times 8 = 624$
10. $56 \times 3 = 168$
11. $91 \times 3 = 273$
12. $49 \times 2 = 98$

Multiplying Three Digits by One

Multiply multi-digit numbers

1. $719 \times 2 = 1438$
2. $395 \times 5 = 1975$
3. $760 \times 2 = 1520$
4. $104 \times 4 = 416$
5. $586 \times 9 = 5274$
6. $157 \times 5 = 785$
7. $219 \times 9 = 1971$
8. $497 \times 3 = 1491$
9. $537 \times 3 = 1611$
10. $903 \times 2 = 1806$
11. $573 \times 2 = 1146$
12. $892 \times 6 = 5352$
13. $391 \times 2 = 782$
14. $433 \times 5 = 2165$
15. $328 \times 2 = 656$
16. $807 \times 4 = 3228$
17. $113 \times 2 = 226$
18. $730 \times 5 = 3650$
19. $274 \times 3 = 822$
20. $225 \times 8 = 1800$
21. $287 \times 4 = 1148$
22. $744 \times 2 = 1488$
23. $908 \times 3 = 2724$

Multiplying Two Digits by Two

Multiply multi-digit numbers

1. $11 \times 99 = 1089$
2. $30 \times 61 = 1830$

Multiplying Two Digits by Two (continued)

Multiply multi-digit numbers (continued)

3. $56 \times 18 = 1008$
4. $95 \times 99 = 9405$
5. $34 \times 43 = 1462$
6. $42 \times 61 = 2562$
7. $29 \times 11 = 319$
8. $18 \times 14 = 252$
9. $67 \times 36 = 2412$
10. $60 \times 83 = 4980$
11. $40 \times 38 = 1520$
12. $35 \times 86 = 3010$
13. $63 \times 21 = 1323$
14. $98 \times 65 = 6370$
15. $33 \times 40 = 1320$

Division with Remainders

Division with remainders

1. $7 \div 3 = 2 \text{ R } 1$
2. $50 \div 7 = 7 \text{ R } 1$
3. $28 \div 5 = 5 \text{ R } 3$
4. $67 \div 9 = 7 \text{ R } 4$
5. $59 \div 5 = 11 \text{ R } 4$
6. $13 \div 2 = 6 \text{ R } 1$
7. $79 \div 7 = 11 \text{ R } 2$
8. $22 \div 9 = 2 \text{ R } 4$
9. $55 \div 6 = 9 \text{ R } 1$
10. $115 \div 9 = 12 \text{ R } 7$
11. $27 \div 5 = 5 \text{ R } 2$
12. $61 \div 8 = 7 \text{ R } 5$
13. $92 \div 8 = 11 \text{ R } 4$
14. $17 \div 2 = 8 \text{ R } 1$
15. $45 \div 7 = 6 \text{ R } 3$
16. $106 \div 9 = 11 \text{ R } 7$
17. $30 \div 8 = 3 \text{ R } 6$
18. $49 \div 4 = 12 \text{ R } 1$
19. $71 \div 9 = 7 \text{ R } 8$

Word problems

20. $24 \div 6 = 4$ trays
21. $77 \div 7 = 11$ food pellets
22. $20 \div 5 = 4$ shelves

Long Division

Long division

1. $330 \div 6 = 55$

Answer Key (2 of 2)

Long Division (continued)

Long division (continued)

2. $411 \div 3 = 137$

3. $768 \div 8 = 96$

4. $279 \div 9 = 31$

5. $525 \div 7 = 75$

6. $925 \div 5 = 185$

7. $560 \div 5 = 112$

8. $260 \div 4 = 65$

9. $696 \div 3 = 232$

Long Division with Remainders

Long division with remainders

1. $627 \div 7 = 89 \text{ R } 4$

2. $404 \div 3 = 134 \text{ R } 2$

3. $888 \div 7 = 126 \text{ R } 6$

4. $545 \div 3 = 181 \text{ R } 2$

5. $817 \div 5 = 163 \text{ R } 2$

6. $438 \div 9 = 48 \text{ R } 6$

7. $799 \div 6 = 133 \text{ R } 1$

8. $171 \div 8 = 21 \text{ R } 3$

9. $725 \div 4 = 181 \text{ R } 1$

10. $453 \div 9 = 50 \text{ R } 3$

Solutions (1 of 4)

Multiplying Two Digits by One

Multiply multi-digit numbers

1.

$$\begin{array}{r} 34 \\ \times 3 \\ \hline 102 \end{array}$$

34×3 , set out in columns. Multiply one place at a time, starting at the ones on the RIGHT.

The ones: $4 \times 3 = 12$. Write the 2 and carry the 1.

The tens: $3 \times 3 = 9$, and the 1 carried over makes 10. Nothing further to carry into, so all of 10 is written down.

So $34 \times 3 = 102$.

2.

$$\begin{array}{r} 71 \\ \times 2 \\ \hline 142 \end{array}$$

71×2 , set out in columns. Multiply one place at a time, starting at the ones on the RIGHT.

The ones: $1 \times 2 = 2$. Write the 2.

The tens: $7 \times 2 = 14$. Nothing further to carry into, so all of 14 is written down.

So $71 \times 2 = 142$.

Division with Remainders

Division with remainders

1.

$$\begin{array}{r} 2 \\ 3 \overline{)7} \\ \underline{6} \\ 1 \end{array}$$

7 shared into groups of 3. Long division starts at the LEFT — the other way round from adding.

Start at the left. How many 3s fit into 7? 2 of them — write the 2 on top. $2 \times 3 = 6$, and $7 - 6$ leaves 1.

Nothing is left to bring down, and 1 is too small to divide again — so that is the remainder. $7 \div 3 = 2$ remainder 1.

2.

$$\begin{array}{r} 7 \\ 7 \overline{)50} \\ \underline{49} \\ 1 \end{array}$$

50 shared into groups of 7. Long division starts at the LEFT — the other way round from adding.

Start at the left. How many 7s fit into 50? 7 of them — write the 7 on top. $7 \times 7 = 49$, and $50 - 49$ leaves 1.

Nothing is left to bring down, and 1 is too small to divide again — so that is the remainder. $50 \div 7 = 7$ remainder 1.

Solutions (2 of 4)

Division with Remainders (continued)

Word problems

20. Marian packed 24 bread rolls into trays of 6.

How many trays did Marian fill? ____

asked: How many trays did Marian fill?

$$24 \div 6 = 4$$

4 trays

Read it through once and do NOTHING. Grabbing the numbers on the first read means choosing an operation before you know the story, and that choice is the only hard part of a word problem.

Now the numbers: 24 and 6. Finding them is not the same as knowing what to do with them — that comes next, and it comes from the story rather than from the numbers.

One total split into groups of a known size, with the question asking HOW MANY groups — which is the other thing dividing asks. So this one is a division: $24 \div 6$.

$24 \div 6 = 4$ trays. And answer the question that was ASKED — "How many trays did Marian fill?" — in trays, because the sum on its own is not yet an answer.

21. Courtney shared 77 food pellets equally among 7 feed bags.

How many food pellets went in each feed bag? ____

asked:

How many food pellets went in each feed bag?

$$77 \div 7 = 11$$

11 food pellets

Read it through once and do NOTHING. Grabbing the numbers on the first read means choosing an operation before you know the story, and that choice is the only hard part of a word problem.

Now the numbers: 77 and 7. Finding them is not the same as knowing what to do with them — that comes next, and it comes from the story rather than from the numbers.

One total shared into equal groups, with the question asking how big one group is — sharing is dividing. So this one is a division: $77 \div 7$.

$77 \div 7 = 11$ food pellets. And answer the question that was ASKED — "How many food pellets went in each feed bag?" — in food pellets, because the sum on its own is not yet an answer.

Solutions (3 of 4)

Long Division

Long division

1.

$$\begin{array}{r} 55 \\ 6 \overline{)330} \\ \underline{30} \\ 30 \\ \underline{30} \\ 0 \end{array}$$

330 shared into groups of 6. Long division starts at the LEFT — the other way round from adding.

Start at the left. How many 6s fit into 33? 5 of them — write the 5 on top. $5 \times 6 = 30$, and $33 - 30$ leaves 3. Bring down the 0, which makes 30.

How many 6s fit into 30? 5 — write it on top. $5 \times 6 = 30$, and $30 - 30$ leaves 0.

Nothing is left to bring down and nothing is left over. $330 \div 6 = 55$.

2.

$$\begin{array}{r} 137 \\ 3 \overline{)411} \\ \underline{3} \\ 11 \\ \underline{9} \\ 21 \\ \underline{21} \\ 0 \end{array}$$

411 shared into groups of 3. Long division starts at the LEFT — the other way round from adding.

Start at the left. How many 3s fit into 4? 1 of them — write the 1 on top. $1 \times 3 = 3$, and $4 - 3$ leaves 1. Bring down the 1, which makes 11.

How many 3s fit into 11? 3 — write it on top. $3 \times 3 = 9$, and $11 - 9$ leaves 2. Bring down the 1, which makes 21.

How many 3s fit into 21? 7 — write it on top. $7 \times 3 = 21$, and $21 - 21$ leaves 0.

Nothing is left to bring down and nothing is left over. $411 \div 3 = 137$.

Long Division with Remainders

Long division with remainders

1.

$$\begin{array}{r} 89 \\ 7 \overline{)627} \\ \underline{56} \\ 67 \\ \underline{63} \\ 4 \end{array}$$

627 shared into groups of 7. Long division starts at the LEFT — the other way round from adding.

Start at the left. How many 7s fit into 62? 8 of them — write the 8 on top. $8 \times 7 = 56$, and $62 - 56$ leaves 6. Bring down the 7, which makes 67.

How many 7s fit into 67? 9 — write it on top. $9 \times 7 = 63$, and $67 - 63$ leaves 4.

Nothing is left to bring down, and 4 is too small to divide again — so that is the remainder. $627 \div 7 = 89$ remainder 4.

Solutions (4 of 4)

Long Division with Remainders (continued)

Long division with remainders (continued)

2.

$$\begin{array}{r} 134 \\ 3 \overline{)404} \\ \underline{3} \\ 10 \\ \underline{9} \\ 14 \\ \underline{12} \\ 2 \end{array}$$

404 shared into groups of 3. Long division starts at the LEFT — the other way round from adding.

Start at the left. How many 3s fit into 4? 1 of them — write the 1 on top. $1 \times 3 = 3$, and $4 - 3$ leaves 1. Bring down the 0, which makes 10.

How many 3s fit into 10? 3 — write it on top. $3 \times 3 = 9$, and $10 - 9$ leaves 1. Bring down the 4, which makes 14.

How many 3s fit into 14? 4 — write it on top. $4 \times 3 = 12$, and $14 - 12$ leaves 2.

Nothing is left to bring down, and 2 is too small to divide again — so that is the remainder. $404 \div 3 = 134$ remainder 2.