Math at Home for Families



TEST PREP

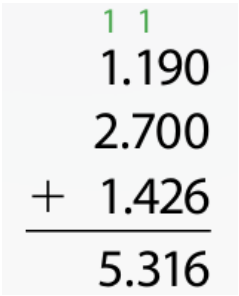
5th Grade

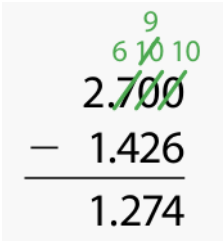
Strategies for Addition and Subtraction Parent Guide

Grade Level: 5

Benchmark: MA.5.NSO.2.3
Add and subtract multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency.

Fifth grade students are expected to solve addition and subtraction with decimals using a standard algorithm.





Grid paper will be provided during the FAST math assessment. Grid paper is a helpful tool that supports accuracy when adding and subtracting multi-digit numbers with decimals.

The boxes help students clearly line up digits by place value (ones, tens, hundreds, etc.), which reduces common errors such as misaligning numbers or regrouping incorrectly. Encouraging your child to practice using grid paper at home can help reinforce this important organizational skill.

$2.7 + 3.603 =$ _____

1			
2 .	7		
3 .	6	0	3
6 .	3	0	3

Decimal Addition—Skills Practice

Name: _____

Add decimals through thousandths.

1 22.098 + 14.103 = _____

2 6.07 + 12.149 = _____

3 3.1 + 4.904 = _____

4 8.062 + 7.189 = _____

5 11.802 + 32.4 = _____

6 13.765 + 6.23 = _____

7 76.147 + 5.07 = _____

8 63.98 + 0.031 = _____

9 0.093 + 0.02 = _____

10 5.2 + 0.871 = _____

11 41.82 + 7.593 = _____

12 2.76 + 27.959 = _____

13 8.91 + 0.092 = _____

14 33.99 + 24.002 = _____

15 1.099 + 0.038 = _____

16 2.08 + 0.671 = _____

17 9.7 + 0.345 = _____

18 1.999 + 52.651 = _____

19 17.76 + 8 + 45.309 = _____

20 68.821 + 15.34 + 1.009 = _____

Decimal Addition—Skills Practice

Name: Answer Key

Add decimals through thousandths.

1. 22.098 + 14.103 = 36.201
2. 6.07 + 12.149 = 18.219
3. 3.1 + 4.904 = 8.004
4. 8.062 + 7.189 = 15.251
5. 11.802 + 32.4 = 44.202
6. 13.765 + 6.23 = 19.995
7. 76.147 + 5.07 = 81.217
8. 63.98 + 0.031 = 64.011
9. 0.093 + 0.02 = 0.113
10. 5.2 + 0.871 = 6.071
11. 41.82 + 7.593 = 49.413
12. 2.76 + 27.959 = 30.719
13. 8.91 + 0.092 = 9.002
14. 33.99 + 24.002 = 57.992
15. 1.099 + 0.038 = 1.137
16. 2.08 + 0.671 = 2.751
17. 9.7 + 0.345 = 10.045
18. 1.999 + 52.651 = 54.65
19. 17.76 + 8 + 45.309 = 71.069
20. 68.821 + 15.34 + 1.009 = 85.17

Decimal Subtraction—Skills Practice

Name: _____

Subtract decimals through hundredths.

1 25.25 − 0.11 = _____

2 0.4 − 0.04 = _____

3 200.4 − 100.04 = _____

4 0.7 − 0.5 = _____

5 70.18 − 10.09 = _____

6 9.5 − 9.05 = _____

7 3.42 − 1.32 = _____

8 0.88 − 0.33 = _____

9 1.25 − 0.75 = _____

10
$$\begin{array}{r} 1.42 \\ -\ 0.43 \\ \hline \end{array}$$

11
$$\begin{array}{r} 1.6 \\ -\ 0.8 \\ \hline \end{array}$$

12
$$\begin{array}{r} 352.52 \\ -\ 108.08 \\ \hline \end{array}$$

13
$$\begin{array}{r} 4.36 \\ -\ 3.6 \\ \hline \end{array}$$

14
$$\begin{array}{r} 725.7 \\ -\ 175.2 \\ \hline \end{array}$$

15
$$\begin{array}{r} 9.36 \\ -\ 5.36 \\ \hline \end{array}$$

16
$$\begin{array}{r} 99.88 \\ -\ 88.77 \\ \hline \end{array}$$

17
$$\begin{array}{r} 99.88 \\ -\ 88.99 \\ \hline \end{array}$$

18
$$\begin{array}{r} 59.1 \\ -\ 25.8 \\ \hline \end{array}$$

19
$$\begin{array}{r} 5.91 \\ -\ 2.58 \\ \hline \end{array}$$

20
$$\begin{array}{r} 802.11 \\ -\ 22.22 \\ \hline \end{array}$$

21
$$\begin{array}{r} 65.62 \\ -\ 2.81 \\ \hline \end{array}$$

Decimal Subtraction—Skills Practice

Name: Answer Key

Subtract decimals through hundredths.

1. $25.25 - 0.11 =$ 25.14
2. $0.4 - 0.04 =$ 0.36
3. $200.4 - 100.04 =$ 100.36
4. $0.7 - 0.5 =$ 0.2
5. $70.18 - 10.09 =$ 60.09
6. $9.5 - 9.05 =$ 0.45
7. $3.42 - 1.32 =$ 2.1
8. $0.88 - 0.33 =$ 0.55
9. $1.25 - 0.75 =$ 0.5

10. $1.42 - 0.43 = 0.99$
11. $1.6 - 0.8 = 0.8$
12. $352.52 - 108.08 = 244.44$
13. $4.36 - 3.6 = 0.76$
14. $725.7 - 175.2 = 550.5$
15. $9.36 - 5.36 = 4.00$
16. $99.88 - 88.77 = 11.11$
17. $99.88 - 88.99 = 10.89$
18. $59.1 - 25.8 = 33.3$
19. $5.91 - 2.58 = 3.33$
20. $802.11 - 22.22 = 779.89$
21. $65.62 - 2.81 = 62.81$

Strategies for Multi-Digit Multiplication Parent Guide

Grade Level: 5

Benchmark: MA.5.NSO.2.1
Multiply multi-digit whole numbers including using a standard algorithm with procedural fluency.

ulti igit ultiplication:
In 5th grade, students can use any algorithm to multiply multi-digit numbers. Below are two common strategies that students use to solve multiplication problems.

The Traditional Standard lgorithm: 4299 x 12

$$\begin{array}{r} {\scriptstyle 1\ 1\ \ \ } \\ 4299 \\ \times\quad 12 \\ \hline 8598 \\ +\,42990 \\ \hline 51588 \end{array}$$

rea odel: 356 x 47
Decompose 356 and 47 by place value. Multiply the value at the top of each column by the value at the start of each row. Add up the partial products.

356 × 47 = ?

	300	+ 50	+ 6
40	300 × 40 = 12,000	50 × 40 = 2,000	6 × 40 = 240
+ 7	300 × 7 = 2,100	50 × 7 = 350	6 × 7 = 42

			1		
	1	2,	0	0	0
		2,	1	0	0
		2,	0	0	0
			3	5	0
			2	4	0
+				4	2
	1	6,	7	3	2

*Tip: Students are able to use grid paper on FAST. Practice lining up digits by place value when adding, subtracting, or multiplying.

Multi-Digit Multiplication—Skills Practice

Name: _____

Multiply.

1 205 × 33

2 6,660 × 70

3 378 × 12

4 1,221 × 91

5 5,062 × 25

6 829 × 62

7 116 × 46

8 7,256 × 56

9 444 × 99

10 3,136 × 14

11 2,222 × 55

12 761 × 80

13 530 × 28

14 142 × 222

15 875 × 305

16 250 × 250



Multi-Digit Multiplication—Skills Practice

Name: Answer Key

Multiply. **Form A**

1 205 × 33 = **6,765**

2 6,660 × 70 = **466,200**

3 378 × 12 = **4,536**

4 1,221 × 91 = **111,111**

5 5,062 × 25 = **126,550**

6 829 × 62 = **51,398**

7 116 × 46 = **5,336**

8 7,256 × 56 = **406,336**

9 444 × 99 = **43,956**

10 3,136 × 14 = **43,904**

11 2,222 × 55 = **122,210**

12 761 × 80 = **60,880**

13 530 × 28 = **14,840**

14 142 × 222 = **31,524**

15 875 × 305 = **266,875**

16 250 × 250 = **62,500**

Strategies for Division
Parent Guide

Grade Level: 5

Benchmark: MA.5.NSO.2.2
Divide multi-digit whole numbers, up to five digits by two digits, including using a standard algorithm with procedural fluency. Represent remainders as fractions.

Example: The quotient 27÷7 gives 3 with remainder 6 which can be expressed as 3 6/7.

Benchmark Clarifications:
Clarification 1: Within this benchmark, the expectation is not to use simplest form for fractions.

ivision:
When students begin learning division, the goal isn't just to "do the steps" — it's to truly understand what division means. Today's instruction builds that understanding first, then moves toward efficiency. The **partial uotients strategy** helps students make sense of the division.

artial uotients:
This method breaks the division into manageable chunks using multiples students know. When the partial quotients are added up, the value is the quotient. There are many ways to solve a problem using this strategy.

$5{,}283 \div 4 = ?$

```
 1,320 R3
4)5283
 −4000   4x1000
 1283
 − 800   4x200
  483
 −400    4x100
   83
  −80    4x20
    3
```

Add the partial quotients.

1,000
200
100
+ 20
1,320

$5{,}283 \div 4 = 1{,}320$ R3

The Standard lgorithm:

$645 \div 43 =$

H	T	O
	1	5
43)6	4	5
−4	3	↓ ← 43 tens
	2	1 5 ← 215 ones
−2	1	5
		0

Tip: Line up the digits by place value in grid paper.
H stands for *Hundreds*
T stands for *Tens*
O stands for *Ones*

Multi-Digit Division—Skills Practice

Name: _____

Divide 3- and 4-digit dividends.

1 $11\overline{)396}$

2 $20\overline{)6{,}040}$

3 $50\overline{)650}$

4 $21\overline{)1{,}725}$

5 $25\overline{)1{,}075}$

6 $40\overline{)765}$

7 $70\overline{)1{,}610}$

8 $22\overline{)968}$

9 $12\overline{)2{,}828}$

10 $31\overline{)961}$

11 $20\overline{)520}$

12 $30\overline{)3{,}375}$



Multi-Digit Division—Skills Practice

Name: Answer Key

Divide 3- and 4-digit dividends. **Form A**

1 $11\overline{)396}$ = **36**

2 $20\overline{)6{,}040}$ = **302**

3 $50\overline{)650}$ = **13**

4 $21\overline{)1{,}725}$ = **$82\frac{1}{7}$**

5 $25\overline{)1{,}075}$ = **43**

6 $40\overline{)765}$ = **$19\frac{1}{8}$**

7 $70\overline{)1{,}610}$ = **23**

8 $22\overline{)968}$ = **44**

9 $12\overline{)2{,}828}$ = **$235\frac{2}{3}$**

10 $31\overline{)961}$ = **31**

11 $20\overline{)520}$ = **26**

12 $30\overline{)3{,}375}$ = **$112\frac{1}{2}$**

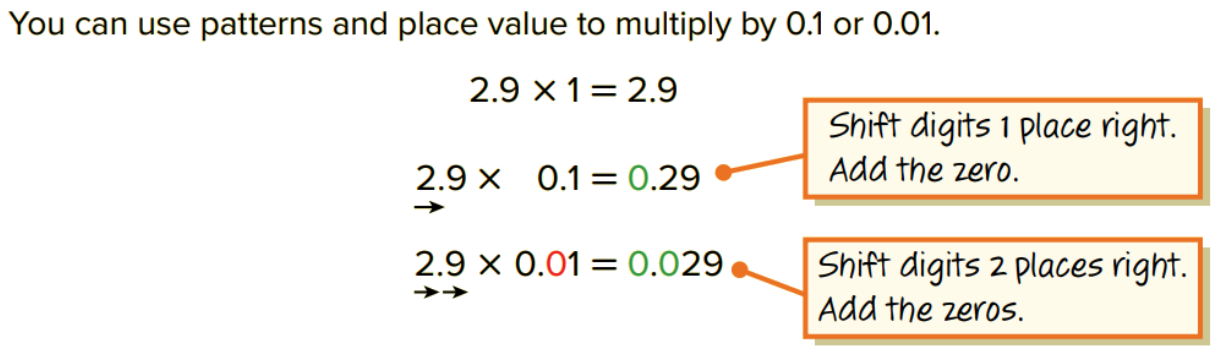
Strategies for Multiplication with Decimals Parent Guide

Grade Level: 5
Benchmark: MA.5.NSO.2.5
Multiply and divide a multi-digit number with decimals to the tenths by one-tenth and one-hundredth with procedural reliability.

> *Example:* The number 12.3 divided by 0.01 can be thought of as ? × 0.01=12.3 to determine the quotient is 1,230.

Benchmark Clarifications:
Clarification 1: Instruction focuses on the place value of the digit when multiplying or dividing.

Strategies for ultiplication ith ecimals:
Students are expected to demonstrate procedural reliability when multiplying a multi-digit number with decimals to the tenths by one-tenth (0.1) or one-hundredth (0.01). Have your child describe the patterns.



Another strategy is to use place value understanding to rewrite the multiplication problem.

$$\begin{aligned} 0.4 \times 16 &= 4 \text{ tenths} \times 16 \\ &= 64 \text{ tenths} \\ &= 6.4 \end{aligned}$$

Multiply by One-Tenth or One-Hundredth—Skills Practice

Name: _____

Multiply decimals by one-tenth or one-hundredth. **Form B**

1. $6.6 \times 0.1 =$ _____
2. $171.2 \times 0.1 =$ _____
3. $4.2 \times 0.01 =$ _____
4. $7.2 \times 0.1 =$ _____
5. $8.3 \times 0.01 =$ _____
6. $3 \times 0.01 =$ _____
7. $35.9 \times 0.1 =$ _____
8. $5.7 \times 0.1 =$ _____
9. $3.9 \times 0.01 =$ _____
10. $2.8 \times 0.1 =$ _____
11. $5.1 \times 0.01 =$ _____
12. $8.7 \times 0.1 =$ _____
13. $13.9 \times 0.01 =$ _____
14. $2.6 \times 0.01 =$ _____
15. $22.2 \times 0.1 =$ _____
16. $0.4 \times 0.1 =$ _____
17. $3.6 \times 0.01 =$ _____
18. $18.4 \times 0.01 =$ _____
19. $2.9 \times 0.01 =$ _____
20. $0.4 \times 0.01 =$ _____
21. $4.9 \times 0.1 =$ _____
22. $9.7 \times 0.01 =$ _____
23. $5.68 \times 0.1 =$ _____
24. $6.3 \times 0.1 =$ _____

Multiply by One-Tenth or One-Hundredth—Skills Practice

Name: Answer Key

Multiply decimals by one-tenth or one-hundredth. **Form B**

1. $6.6 \times 0.1 =$ 0.66
2. $171.2 \times 0.1 =$ 17.12
3. $4.2 \times 0.01 =$ 0.042
4. $7.2 \times 0.1 =$ 0.72
5. $8.3 \times 0.01 =$ 0.083
6. $3 \times 0.01 =$ 0.03
7. $35.9 \times 0.1 =$ 3.59
8. $5.7 \times 0.1 =$ 0.57
9. $3.9 \times 0.01 =$ 0.039
10. $2.8 \times 0.1 =$ 0.28
11. $5.1 \times 0.01 =$ 0.051
12. $8.7 \times 0.1 =$ 0.87
13. $13.9 \times 0.01 =$ 0.139
14. $2.6 \times 0.01 =$ 0.026
15. $22.2 \times 0.1 =$ 2.22
16. $0.4 \times 0.1 =$ 0.04
17. $3.6 \times 0.01 =$ 0.036
18. $18.4 \times 0.01 =$ 0.184
19. $2.9 \times 0.01 =$ 0.029
20. $0.4 \times 0.01 =$ 0.004
21. $4.9 \times 0.1 =$ 0.49
22. $9.7 \times 0.01 =$ 0.097
23. $5.68 \times 0.1 =$ 0.568
24. $6.3 \times 0.1 =$ 0.63

Strategies for Compare and Order Decimals Parent Guide

Grade Level: 5
Benchmark: MA.5.NSO.1.5
Plot, order and compare multi-digit numbers with decimals up to the thousandths.

Example: The numbers 4.891, 4.918 and 4.198 can be arranged in ascending order as 4.198, 4.891 and 4.918.
Example: 0.15<0.2 because fifteen hundredths is less than twenty hundredths, which is the same as two tenths.

Strategies for Comparing:

One way to compare decimals is to use a place-value chart. For example, compare 7.033 and 7.02. Write a 0 in the thousandths column for 7.02. Start by comparing the ones.

Ones	.	Tenths	Hundredths	Thousandths
7	.	0	3	3
7	.	0	2	0

$7 = 7$ $0 = 0$ $3 > 2$

The ones digits are the same. The tenths digits are the same. 3 hundredths $>$ 2 hundredths. So, $7.033 > 7.02$.

SYMBOL	WORDS
$>$	greater than
$<$	less than

***Tip: Use the grid paper to line up the digits in each number by place value.**

Plot, Order, and Compare Decimals—Skills Practice

Name: _____

Compare and order decimals to thousandths. **Form A**

Write <, >, or = to compare the numbers.

1. 9.879 ◯ 8.846
2. 0.616 ◯ 0.606
3. 7.364 ◯ 6.956
4. 8.42 ◯ 8.420
5. 6.803 ◯ 6.083
6. 5.173 ◯ 5.713
7. 9.02 ◯ 9.2
8. 2.84 ◯ 2.845
9. 0.357 ◯ 0.357
10. 5.308 ◯ 5.038
11. 1.468 ◯ 0.749
12. 0.676 ◯ 0.68

Order the numbers from least to greatest.

13. 0.725, 0.91, 0.671, 0.095, 0.15

    _____, _____, _____, _____, _____

14. 4.983, 4.052, 4.784, 4.907, 4.984

    _____, _____, _____, _____, _____

15. 6.602, 6.159, 6.623, 6.271, 6.908

    _____, _____, _____, _____, _____

16. 1.611, 1.901, 1.051, 1.738, 1.288

    _____, _____, _____, _____, _____

17. 2.37, 2.203, 2.687, 2.776, 2.162

    _____, _____, _____, _____, _____

18. 7.742, 7.032, 7.4, 7.445, 7.783

    _____, _____, _____, _____, _____

19. 0.48, 0.197, 0.274, 0.775, 0.882

    _____, _____, _____, _____, _____

20. 5.837, 5.255, 5.954, 5.469, 5.252

    _____, _____, _____, _____, _____

Plot, Order, and Compare Decimals—Skills Practice

Name: Answer Key

Compare and order decimals to thousandths. **Form A**

Write <, >, or = to compare the numbers.

1. 9.879 > 8.846
2. 0.616 > 0.606
3. 7.364 > 6.956
4. 8.42 = 8.420
5. 6.803 > 6.083
6. 5.173 < 5.713
7. 9.02 < 9.2
8. 2.84 < 2.845
9. 0.357 = 0.357
10. 5.308 > 5.038
11. 1.468 > 0.749
12. 0.676 < 0.68

Order the numbers from least to greatest.

13. 0.725, 0.91, 0.671, 0.095, 0.15
    0.095, 0.15, 0.671, 0.725, 0.91
14. 4.983, 4.052, 4.784, 4.907, 4.984
    4.052, 4.784, 4.907, 4.983, 4.984
15. 6.602, 6.159, 6.623, 6.271, 6.908
    6.159, 6.271, 6.602, 6.623, 6.908
16. 1.611, 1.901, 1.051, 1.738, 1.288
    1.051, 1.288, 1.611, 1.738, 1.901
17. 2.37, 2.203, 2.687, 2.776, 2.162
    2.162, 2.203, 2.37, 2.687, 2.776
18. 7.742, 7.032, 7.4, 7.445, 7.783
    7.032, 7.4, 7.445, 7.742, 7.783
19. 0.48, 0.197, 0.274, 0.775, 0.882
    0.197, 0.274, 0.48, 0.775, 0.882
20. 5.837, 5.255, 5.954, 5.469, 5.252
    5.252, 5.255, 5.469, 5.837, 5.954