

1 Write numbers up to one million in digits*Let's Learn*

Write the numbers below in digits.	
Four hundred and three thousand, eight hundred and seven 403 807	Four hundred thousand, two hundred and twenty-one 400 221
Nine hundred and nine thousand 909 000	Two hundred and twenty thousand and twenty 220 020

Your Turn

Write the numbers below in digits.	
Two hundred and ten thousand, two hundred and one 210 201	Three hundred thousand, three hundred and three 300 303
Eight hundred and eight thousand 808 000	Five hundred and fifty thousand and fifty 550 050

2 Write numbers up to one million in words*Let's Learn*

Write the numbers below in words.	
384,384	Three hundred and eighty-four thousand, three hundred and eighty-four
592,000	Five hundred and ninety-two thousand
400,040	Four hundred thousand and forty
480,500	Four hundred and eighty thousand, five hundred

Your Turn

Write the numbers below in words.	
271,207	Two hundred and seventy-one thousand, two hundred and seven
384,000	Three hundred and eighty-four thousand
800,080	Eight hundred thousand and eighty
210,900	Two hundred and ten thousand, nine hundred



3 Identify the digit in each place value for six-digit numbers*Let's Learn*

For the questions below, write the digit of each place value.

198,238

Hundred-thousands:

1

Ten-thousands:

9

Thousands:

8

Hundreds:

2

Tens:

3

Ones:

8

201,467

Hundreds:

4

Hundred-thousands:

2

Ten-thousands:

0

Ones:

7

Thousands:

1

Tens:

6

392,564

Ten-thousands:

9

Tens:

6

Ones:

4

Hundred-thousands:

3

Thousands:

2

Hundreds:

5*Your Turn*

For the questions below, write the digit of each place value.

573,218

Hundred-thousands:

5

Ten-thousands:

7

Thousands:

3

Hundreds:

2

Tens:

1

Ones:

8

643,752

Hundreds:

7

Hundred-thousands:

6

Ten-thousands:

4

Ones:

2

Thousands:

3

Tens:

5

297,138

Ten-thousands:

9

Tens:

3

Ones:

8

Hundred-thousands:

2

Thousands:

7

Hundreds:

1

4 Identify the value of each digit in six-digit numbers*Let's Learn*

For the questions below, write the value of each digit.

92,035

9 represents: 2 represents: 0 represents: 3 represents: 5 represents:

481,297

2 represents: 1 represents: 7 represents: 4 represents: 9 represents: 8 represents:

509,413

0 represents: 4 represents: 5 represents: 3 represents: 1 represents: 9 represents: *Your Turn*

For the questions below, write the value of each digit.

45,602

4 represents: 5 represents: 6 represents: 0 represents: 2 represents:

528,937

9 represents: 8 represents: 7 represents: 5 represents: 3 represents: 2 represents:

409,375

0 represents: 3 represents: 4 represents: 5 represents: 7 represents: 9 represents: **5 Partition six-digit numbers***Let's Learn*

Partition the numbers below.

$$40951 = 40\,000 + 900 + 50 + 1$$

$$583912 = 500\,000 + 80\,000 + 3\,000 + 900 + 10 + 2$$

$$450155 = 400\,000 + 50\,000 + 100 + 50 + 5$$

Your Turn

Partition the numbers below.

$$80627 = 80\,000 + 600 + 20 + 7$$

$$755766 = 700\,000 + 50\,000 + 5\,000 + 700 + 60 + 6$$

$$626026 = 600\,000 + 20\,000 + 6\,000 + 20 + 6$$

6 Compare numbers with up to six digits*Let's Learn*

Write > or < in each box.

525252 252525333333 44444563929 592932404888 408444815531 81531555000 500000*Your Turn*

Write > or < in each box.

464646 644444200000 99999696222 669666458458 485459265526 26565666000 600000**7 Order numbers with up to six digits***Let's Learn*

Order each set of numbers from smallest to largest.

540 000, 45 400, 54 000, 455 000, 544 000

45 400

54 000

455 000

540 000

544 000

77 666, 677 666, 67 777, 767 666, 776 777

67 777

77 666

677 666

767 666

776 777

Your Turn

Order each set of numbers from smallest to largest.

660 000, 60 900, 690 000, 9 600, 669 000

9 600

60 900

660 000

669 000

690 000

45 555, 540 444, 54 444, 545 555, 554 444

45 555

54 444

540 444

545 555

554 444



8 Round to the nearest 10 000, 1 000, 100 or 10*Let's Learn*

For the questions below, round each number to the specified degree of accuracy.

282,493 Round to the nearest...	391,295 Round to the nearest...	302,401 Round to the nearest...
Hundred thousand: 300 000	Hundred thousand: 400 000	Hundred thousand: 300 000
Ten thousand: 280 000	Ten thousand: 390 000	Ten thousand: 300 000
Thousand: 282 000	Thousand: 391 000	Thousand: 302 000
Hundred: 282 500	Hundred: 391 300	Hundred: 302 400
Ten: 282 490	Ten: 391 300	Ten: 302 400

Your Turn

For the questions below, round each number to the specified degree of accuracy.

351,454 Round to the nearest...	160,165 Round to the nearest...	656,606 Round to the nearest...
Hundred thousand: 400 000	Hundred thousand: 200 000	Hundred thousand: 700 000
Ten thousand: 350 000	Ten thousand: 160 000	Ten thousand: 660 000
Thousand: 351 000	Thousand: 160 000	Thousand: 657 000
Hundred: 351 500	Hundred: 162 200	Hundred: 656 600
Ten: 351 450	Ten: 160 170	Ten: 656 610



9 Write numbers to 1000 in Roman numerals*Let's Learn*

Write the numbers below in Roman numerals.				
124 = CXXIV	249 = CCXLIX	305 = CCCV	494 = CDXCIV	509 = DIX
590 = DXC	634 = DCXXXIV	799 = DCCXCIX	850 = DCCCL	981 = CMLXXXI

*Your Turn*

Write the numbers below in Roman numerals.				
133 = CXXXIII	244 = CCXLIV	301 = CCCI	449 = CDXLIX	505 = DV
560 = DLX	648 = DCXLVIII	792 = DCCXCII	870 = DCCCLXX	972 = CMLXXII

**10 Read Roman numerals to 1000***Let's Learn*

Write the numbers represented by Roman numerals below.				
CVII = 107	CCXXXVI = 236	CCXLIV = 244	CCCLXXVIII = 378	CCCXC = 390
CDIX = 409	CDLX = 460	DLXXI = 571	DCII = 602	DCXX = 620
DCCLXXVII = 777	DCCXCIX = 799	DCCCXXX = 830	CMLXI = 961	CMXCVI = 996

*Your Turn*

Write the numbers represented by Roman numerals below.				
CIV = 104	CCXXVIII = 228	CCCXLV = 345	CCCLXXXVI = 386	CCCXCIX = 399
CDIII = 403	CDXC = 490	DXLI = 541	DCIV = 604	DCXL = 640
DCLXVI = 666	DCCXCVII = 797	DCCCX = 810	CML = 950	CMLXXXIV = 984



1 Count on in hundreds from a six-digit number*Let's Learn*

For the questions below, write the next seven numbers, counting in hundreds.

19566, 19666, 19766,

19866	19966	20066	20166	20266	20366	20466
-------	-------	-------	-------	-------	-------	-------

199355, 199455, 199555,

199655	199755	199855	199955	200055	200155	200255
--------	--------	--------	--------	--------	--------	--------

Your Turn

For the questions below, write the next seven numbers, counting in hundreds.

59308, 59408, 59508,

59608	59708	59808	59909	60008	60108	60208
-------	-------	-------	-------	-------	-------	-------

299599, 299699, 299799,

299899	299999	300099	300199	300299	300399	300499
--------	--------	--------	--------	--------	--------	--------

2 Add a multiple of 100 to a six-digit number*Let's Learn*

Complete the questions below using mental methods.

$8241 + 700 =$ 8 941	$27553 + 800 =$ 28 353	$289931 + 400 =$ 290 331	$399555 + 700 =$ 400 255
--------------------------------	----------------------------------	------------------------------------	------------------------------------

Your Turn

Complete the questions below using mental methods.

$6055 + 800 =$ 6 855	$38850 + 500 =$ 39 350	$469705 + 800 =$ 470 505	$899411 + 600 =$ 900 011
--------------------------------	----------------------------------	------------------------------------	------------------------------------

3 Count on in thousands from a six-digit number*Let's Learn*

For the questions below, write the next seven numbers, counting in thousands.

92522, 93522, 94522,

95522	96522	97522	98522	995221	100522	101522
-------	-------	-------	-------	--------	--------	--------

792322, 793322, 794322,

795322	796322	797322	798322	799322	800322	801322
--------	--------	--------	--------	--------	--------	--------

Your Turn

For the questions below, write the next seven numbers, counting in thousands.

93444, 94444, 95444,

96444	97444	98444	99444	100444	101444	102444
-------	-------	-------	-------	--------	--------	--------

694400, 695400, 696400,

697400	698400	699400	700400	701400	702400	703400
--------	--------	--------	--------	--------	--------	--------

4 Add a multiple of 1000 to a six-digit number*Let's Learn*

Complete the questions below using mental methods.

$14824 + 6000 =$ 20 824	$94600 + 6000 =$ 100 600	$383695 + 8000 =$ 391 695	$299915 + 9000 =$ 308 915
-----------------------------------	------------------------------------	-------------------------------------	-------------------------------------

Your Turn

Complete the questions below using mental methods.

$25800 + 5000 =$ 30 800	$97900 + 6000 =$ 103 900	$585585 + 7000 =$ 592 585	$399933 + 8000 =$ 407 933
-----------------------------------	------------------------------------	-------------------------------------	-------------------------------------

5 Count on in steps of 10 000 from a six-digit number*Let's Learn*

For the questions below, write the next seven numbers, counting in ten-thousands.

79500, 89500, 99500,

465000, 475000, 485000,

Your Turn

For the questions below, write the next seven numbers, counting in ten-thousands.

73300, 83300, 93300,

678000, 688000, 698000,

6 Add a multiple of 10 000 to a six-digit number*Let's Learn*

Complete the questions below using mental methods.

 $65000 + 40000 = \mathbf{105\ 000}$ $395000 + 30000 = \mathbf{425\ 000}$ $284500 + 50000 = \mathbf{334\ 500}$ *Your Turn*

Complete the questions below using mental methods.

 $77000 + 70000 = \mathbf{147\ 000}$ $675000 + 50000 = \mathbf{725\ 000}$ $464600 + 60000 = \mathbf{524\ 600}$ **7 Add a multiple of 100 000 to a six-digit number***Let's Learn* $49500 + 300000 = \mathbf{349\ 500}$ $230000 + 700000 = \mathbf{930\ 000}$ $284500 + 200000 = \mathbf{484\ 500}$ *Your Turn* $50000 + 500000 = \mathbf{550\ 000}$ $150000 + 600000 = \mathbf{750\ 000}$ $343400 + 400000 = \mathbf{743\ 400}$ **8 Add large numbers using column addition***Let's Learn*

Complete the questions below using column addition.

 $9681 + 5562 =$
 $\mathbf{15\ 243}$ $95435 + 90988 =$
 $\mathbf{186\ 423}$ $833560 + 67650 =$
 $\mathbf{901\ 210}$ $572749 + 231758 =$
 $\mathbf{804\ 507}$ *Your Turn*

Complete the questions below using column addition.

 $7873 + 7575 =$
 $\mathbf{15\ 448}$ $54967 + 50963 =$
 $\mathbf{105\ 930}$ $214892 + 88122 =$
 $\mathbf{303\ 014}$ $376857 + 192754 =$
 $\mathbf{569\ 611}$ **9 Solve missing digit addition problems***Let's Learn*

Complete the addition questions below by finding the missing digits.

		¹	¹	¹		
	8	3	6	7	8	4
+		2	6	3	5	4
	8	6	3	1	3	8

		¹	¹	¹	¹	
	5	7	2	7	4	9
+	2	3	1	7	5	8
	8	0	4	5	0	7

Your Turn

Complete the addition questions below by finding the missing digits.

		¹	¹	¹		
	6	4	9	5	4	5
+		4	3	5	6	4
	6	9	3	1	0	9

		¹	¹	¹	¹	
	3	4	6	6	7	7
+	3	9	1	6	7	5
	7	3	8	3	5	2

10 Add to a negative number*Let's Learn*

$-2 + 5 = 3$

$-4 + 8 = 4$

$-3 + 9 = 6$

*Your Turn*

$-3 + 7 = 4$

$-2 + 8 = 6$

$-7 + 8 = 1$

**11 Complete number sequences involving negative numbers***Let's Learn*

For the questions below, write the next numbers in each sequence.

$-8, -6, -4, \boxed{-2}, \boxed{0}, \boxed{2}, \boxed{4}, \boxed{6}, \boxed{8}, \boxed{10}$

$7, 5, 3, \boxed{1}, \boxed{-1}, \boxed{-3}, \boxed{-5}, \boxed{-7}, \boxed{-9}, \boxed{-11}$

$-11, -8, -5, \boxed{-2}, \boxed{1}, \boxed{4}, \boxed{7}, \boxed{10}, \boxed{13}$

*Your Turn*

For the questions below, write the next numbers in each sequence.

$-11, -9, -7, \boxed{-5}, \boxed{-3}, \boxed{-1}, \boxed{1}, \boxed{3}, \boxed{5}, \boxed{7}$

$8, 5, 2, \boxed{1}, \boxed{0}, \boxed{-2}, \boxed{-4}, \boxed{-6}, \boxed{-8}, \boxed{-10}$

$-12, -9, -6, \boxed{-3}, \boxed{0}, \boxed{3}, \boxed{6}, \boxed{9}, \boxed{12}$

**12 Add to a negative number with larger numbers***Let's Learn*

$-34 + 69 = 35$

$-3 + 83 = 80$

$-89 + 52 = -37$

*Your Turn*

$-32 + 53 = 21$

$-7 + 67 = 60$

$-84 + 22 = -62$



1 Count back in hundreds from a six-digit number*Let's Learn*

For the questions below, write the next seven numbers, counting back in hundreds.

100640, 100540, 100440, 244444, 244344, 244244, *Your Turn*

For the questions below, write the next seven numbers, counting back in hundreds.

100533, 100433, 100333, 234322, 234222, 234122, **2 Subtract a multiple of 100 from a six-digit number***Let's Learn*

Complete the questions below using mental methods.

$49882 - 500 =$ 49 382	$10191 - 500 =$ 9 691	$284529 - 800 =$ 283 729	$100394 - 600 =$ 99 794
----------------------------------	---------------------------------	------------------------------------	-----------------------------------

Your Turn

Complete the questions below using mental methods.

$22922 - 700 =$ 22 222	$10395 - 500 =$ 9 895	$313131 - 600 =$ 312 531	$100522 - 600 =$ 99 922
----------------------------------	---------------------------------	------------------------------------	-----------------------------------

3 Count back in thousands from a six-digit number*Let's Learn*

For the questions below, write the next seven numbers, counting back in thousands.

103555, 102555, 101555, 355222, 354222, 353222, *Your Turn*

For the questions below, write the next seven numbers, counting back in thousands.

104450, 103450, 102450, 465333, 464333, 463333, **4 Subtract a multiple of 1000 from a six-digit number***Let's Learn*

Complete the questions below using mental methods.

$28284 - 2000 =$ 26 284	$231932 - 5000 =$ 226 932	$286745 - 8000 =$ 278 745	$400400 - 4000 =$ 396 400
-----------------------------------	-------------------------------------	-------------------------------------	-------------------------------------

Your Turn

Complete the questions below using mental methods.

$39393 - 3000 =$ 36 393	$451900 - 5000 =$ 446 900	$275755 - 6000 =$ 269 755	$300300 - 7000 =$ 293 300
-----------------------------------	-------------------------------------	-------------------------------------	-------------------------------------

5 Count back in steps of 10 000 from a six-digit number*Let's Learn*

For the questions below, write the next seven numbers, counting back in ten-thousands.

135400, 125400, 115400,	<input type="text" value="105400"/>	<input type="text" value="95400"/>	<input type="text" value="85400"/>	<input type="text" value="75400"/>	<input type="text" value="65400"/>	<input type="text" value="55400"/>	<input type="text" value="45400"/>
944005, 934005, 924005,	<input type="text" value="914005"/>	<input type="text" value="904005"/>	<input type="text" value="894005"/>	<input type="text" value="884005"/>	<input type="text" value="874005"/>	<input type="text" value="864005"/>	<input type="text" value="854005"/>

Your Turn

For the questions below, write the next seven numbers, counting back in ten-thousands.

146600, 136600, 126600,	<input type="text" value="116600"/>	<input type="text" value="106600"/>	<input type="text" value="96600"/>	<input type="text" value="86600"/>	<input type="text" value="76600"/>	<input type="text" value="66600"/>	<input type="text" value="56600"/>
835900, 825900, 815900,	<input type="text" value="805900"/>	<input type="text" value="795900"/>	<input type="text" value="785900"/>	<input type="text" value="775900"/>	<input type="text" value="765900"/>	<input type="text" value="755900"/>	<input type="text" value="745900"/>

6 Subtract a multiple of 10 000 from a six-digit number*Let's Learn*

Complete the questions below using mental methods.

$186000 - 30000 = \mathbf{156\ 000}$	$224284 - 70000 = \mathbf{154\ 284}$	$369009 - 70000 = \mathbf{299\ 009}$
--------------------------------------	--------------------------------------	--------------------------------------

Your Turn

Complete the questions below using mental methods.

$199000 - 90000 = \mathbf{109\ 000}$	$343434 - 70000 = \mathbf{273\ 434}$	$646004 - 80000 = \mathbf{566\ 004}$
--------------------------------------	--------------------------------------	--------------------------------------

7 Subtract a multiple of 100 000 from a six-digit number*Let's Learn*

$555000 - 500000 = \mathbf{55\ 000}$	$490000 - 300000 = \mathbf{190\ 000}$	$750000 - 500000 = \mathbf{250\ 000}$
--------------------------------------	---------------------------------------	---------------------------------------

Your Turn

$777000 - 700000 = \mathbf{77\ 000}$	$550000 - 300000 = \mathbf{250\ 000}$	$750000 - 200000 = \mathbf{550\ 000}$
--------------------------------------	---------------------------------------	---------------------------------------

8 Solve missing number addition problems with six-digit numbers mentally*Let's Learn*

Complete the questions below by finding the missing numbers.

$56500 + \mathbf{5\ 000} = 61500$	$93300 + \mathbf{10\ 000} = 103300$
$290005 + \mathbf{300\ 000} = 590005$	$299850 + \mathbf{500} = 300350$

Your Turn

Complete the questions below by finding the missing numbers.

$59500 + \mathbf{3\ 000} = 62500$	$195500 + \mathbf{20\ 000} = 215500$
$330003 + \mathbf{300\ 000} = 630003$	$399770 + \mathbf{700} = 400470$

9 Solve missing number subtraction problems with six-digit numbers mentally*Let's Learn*

$30450 - \mathbf{800} = 29650$	$310300 - \mathbf{100\ 000} = 210300$
$246700 - \mathbf{50\ 000} = 196700$	$677050 - \mathbf{8\ 000} = 669050$

Your Turn

$31450 - \mathbf{500} = 30950$	$550500 - \mathbf{500\ 000} = 50500$
$333300 - \mathbf{60\ 000} = 273300$	$602020 - \mathbf{3\ 000} = 599020$

10 Subtract large numbers using column subtraction*Let's Learn*

Complete the questions below using column subtraction.

$$\begin{array}{r} 13442 \\ - 5144 \\ \hline 8\ 298 \end{array}$$

$$124485 - 29669 = 94\ 816$$

$$214489 - 47969 = 166\ 520$$

$$352063 - 147445 = 204\ 618$$

Your Turn

Complete the questions below using column subtraction.

$$11711 - 2188 = 9\ 523$$

$$124242 - 44638 = 79\ 604$$

$$112269 - 86362 = 25\ 907$$

$$576191 - 267548 = 308\ 643$$

11 Exchange across zero to subtract large numbers using column subtraction*Let's Learn*

$$10005 - 5245 = 4\ 760$$

$$166005 - 85936 = 80\ 069$$

$$404004 - 35488 = 368\ 516$$

$$392003 - 139549 = 252\ 454$$

Your Turn

$$10009 - 6525 = 3\ 484$$

$$123004 - 50018 = 72\ 986$$

$$706002 - 19538 = 686\ 464$$

$$645000 - 337457 = 307\ 543$$

12 Solve missing number problems for addition and subtraction with large numbers*Let's Learn*

Complete the questions below by finding the missing numbers.

$$\boxed{860\ 514} = 656571 + 203943$$

$$\boxed{233\ 628} + 58392 = 292020$$

$$654674 - \boxed{118\ 138} = 536536$$

$$\boxed{230\ 355} - 147445 = 82910$$

Your Turn

Complete the questions below by finding the missing numbers.

$$\boxed{691\ 526} = 474733 + 216793$$

$$\boxed{138\ 485} + 25546 = 164031$$

$$861790 - \boxed{714\ 513} = 147277$$

$$\boxed{426\ 079} - 57923 = 368156$$

13 Solve missing digit subtraction problems*Let's Learn*

Complete the subtraction questions below by finding the missing digits.

$$\begin{array}{r} \overset{0}{1} \overset{13}{1} \overset{4}{4} \overset{10}{0} \overset{5}{5} \overset{8}{8} \\ - \quad \overset{7}{7} \overset{8}{8} \overset{9}{9} \overset{1}{1} \overset{8}{8} \\ \hline \quad \overset{3}{3} \overset{5}{5} \overset{1}{1} \overset{4}{4} \overset{0}{0} \end{array}$$

$$\begin{array}{r} \overset{7}{8} \overset{15}{8} \overset{6}{6} \overset{10}{0} \overset{7}{8} \overset{3}{3} \\ - \quad \overset{1}{1} \overset{4}{4} \overset{7}{7} \overset{5}{5} \overset{4}{4} \overset{7}{7} \\ \hline \quad \overset{7}{7} \overset{3}{3} \overset{8}{8} \overset{5}{5} \overset{3}{3} \overset{6}{6} \end{array}$$

Your Turn

Complete the subtraction questions below by finding the missing digits.

$$\begin{array}{r} \overset{2}{1} \overset{15}{3} \overset{6}{6} \overset{12}{2} \overset{6}{6} \overset{6}{6} \\ - \quad \overset{8}{8} \overset{6}{6} \overset{7}{7} \overset{1}{1} \overset{5}{5} \\ \hline \quad \overset{4}{4} \overset{9}{9} \overset{5}{5} \overset{5}{5} \overset{1}{1} \end{array}$$

$$\begin{array}{r} \overset{7}{5} \overset{11}{8} \overset{2}{2} \overset{10}{0} \overset{4}{5} \overset{1}{1} \\ - \quad \overset{3}{3} \overset{6}{6} \overset{2}{2} \overset{6}{6} \overset{4}{4} \overset{2}{2} \\ \hline \quad \overset{2}{2} \overset{1}{1} \overset{9}{9} \overset{4}{4} \overset{0}{0} \overset{9}{9} \end{array}$$

14 Subtract to make a negative answer

Let's Learn

$3 - 7 = -4$

$4 - 9 = -5$

$1 - 8 = -7$



Your Turn

$5 - 9 = -4$

$4 - 5 = -1$

$1 - 6 = -5$



15 Subtract to make a negative answer with larger numbers

Let's Learn

$26 - 72 = -46$

$5 - 85 = -80$

$89 - 91 = -2$



Your Turn

$39 - 85 = -46$

$8 - 89 = -81$

$58 - 64 = -6$



1 Multiply 2, 3, 4 or 5-digit numbers by 10*Let's Learn*

$28 \times 10 = \mathbf{280}$

$509 \times 10 = \mathbf{5090}$

$86054 \times 10 = \mathbf{860\ 540}$

*Your Turn*

$33 \times 10 = \mathbf{330}$

$580 \times 10 = \mathbf{5800}$

$83854 \times 10 = \mathbf{838\ 540}$

**2 Multiply 2, 3 or 4 digit numbers by 100***Let's Learn*

$63 \times 100 = \mathbf{6300}$

$700 \times 100 = \mathbf{70\ 000}$

$5008 \times 100 = \mathbf{500\ 800}$

*Your Turn*

$54 \times 100 = \mathbf{5400}$

$606 \times 100 = \mathbf{60\ 600}$

$4030 \times 100 = \mathbf{403\ 000}$

**3 Multiply 2 or 3 digit numbers by 1000***Let's Learn*

$6 \times 1000 = \mathbf{6000}$

$79 \times 1000 = \mathbf{78\ 000}$

$201 \times 1000 = \mathbf{201\ 000}$

*Your Turn*

$9 \times 1000 = \mathbf{9000}$

$80 \times 1000 = \mathbf{80\ 000}$

$421 \times 1000 = \mathbf{421\ 000}$

**4 Solve missing number problems for multiplying by 10, 100 or 1000***Let's Learn*

$30 \times \boxed{\mathbf{1000}} = 30000$

$78 \times \boxed{\mathbf{100}} = 7800$

$2050 \times \boxed{\mathbf{10}} = 20500$

*Your Turn*

$50 \times \boxed{\mathbf{100}} = 5000$

$446 \times \boxed{\mathbf{1000}} = 446000$

$250 \times \boxed{\mathbf{10}} = 2500$

**5 Multiply a single-digit number by a multiple of 1000***Let's Learn*

$3 \times 2000 = \mathbf{6000}$

$6000 \times 5 = \mathbf{30\ 000}$

$7 \times 7000 = \mathbf{49\ 000}$

*Your Turn*

$2 \times 3000 = \mathbf{6000}$

$5000 \times 9 = \mathbf{45\ 000}$

$8 \times 8000 = \mathbf{64\ 000}$

**6 Multiply by a four-digit number using the grid method***Let's Learn*

Answer the questions below using the grid method.

$5 \times 5289 = \mathbf{26\ 445}$

$3 \times 7441 = \mathbf{22\ 323}$

*Your Turn*

Answer the questions below using the grid method.

$4 \times 4769 = \mathbf{19\ 076}$

$8 \times 4761 = \mathbf{38\ 088}$

**7 Multiply by a four-digit number using a written method***Let's Learn*

Answer the questions below using the column method.

$3084 \times 3 = \mathbf{9252}$

$3516 \times 5 = \mathbf{17\ 580}$

$9 \times 1515 = \mathbf{13\ 635}$

*Your Turn*

Answer the questions below using the column method.

$2086 \times 4 = \mathbf{8344}$

$5314 \times 6 = \mathbf{31\ 884}$

$7 \times 1716 = \mathbf{12\ 012}$



8 Multiply two multiples of 10*Let's Learn*

$70 \times 60 = 4200$

$50 \times 80 = 4000$

$90 \times 90 = 8100$

*Your Turn*

$60 \times 60 = 3600$

$40 \times 90 = 3600$

$80 \times 50 = 4000$

**9 Multiply two two-digit numbers using the grid method***Let's Learn*

Answer the questions below using the grid method.

$66 \times 53 = 3498$

$73 \times 45 = 3285$

*Your Turn*

Answer the questions below using the grid method.

$58 \times 47 = 2726$

$85 \times 33 = 2805$

**10 Multiply two two-digit numbers using long multiplication***Let's Learn*

Answer the questions below using the column method.

$71 \times 46 = 3266$

$81 \times 37 = 2997$

$54 \times 23 = 1242$

$53 \times 56 = 2968$

*Your Turn*

Answer the questions below using the column method.

$61 \times 51 = 3111$

$73 \times 27 = 1971$

$73 \times 25 = 1825$

$44 \times 58 = 2552$

**11 Multiply a multiple of 100 by a multiple of 10***Let's Learn*

$700 \times 60 = 42\ 000$

$500 \times 80 = 40\ 000$

$900 \times 90 = 81\ 000$

*Your Turn*

$800 \times 60 = 48\ 000$

$500 \times 20 = 10\ 000$

$800 \times 80 = 64\ 000$

**12 Multiply a three-digit number by a two-digit number using the grid method***Let's Learn*

Answer the questions below using the grid method.

$56 \times 234 = 13\ 104$

$94 \times 517 = 48\ 598$

*Your Turn*

Answer the questions below using the grid method.

$65 \times 229 = 14\ 885$

$93 \times 428 = 39\ 804$

**13 Multiply a three-digit number by a two-digit number using long multiplication***Let's Learn*

Answer the questions below using the column method.

$694 \times 34 = 23\ 596$

$785 \times 23 = 18\ 055$

$678 \times 54 = 36\ 612$

*Your Turn*

Answer the questions below using the column method.

$418 \times 46 = 19\ 228$

$836 \times 27 = 22\ 572$

$569 \times 63 = 35\ 847$



1 Divide 3, 4, 5 and 6 digit multiples of 10 by 10*Let's Learn*

$240 \div 10 = 24$

$4500 \div 10 = 450$

$607060 \div 10 = 60\ 706$

*Your Turn*

$320 \div 10 = 32$

$4050 \div 10 = 405$

$555500 \div 10 = 55\ 550$

**2 Divide a 4, 5 or 6 digit multiple of 100 by 100***Let's Learn*

$4300 \div 100 = 43$

$12300 \div 100 = 123$

$450000 \div 100 = 4500$

*Your Turn*

$5600 \div 100 = 56$

$15000 \div 100 = 150$

$430300 \div 100 = 4303$

**3 Divide 5 or 6 digit multiples of 1000 by 1000***Let's Learn*

$3000 \div 1000 = 3$

$50000 \div 1000 = 50$

$802000 \div 1000 = 802$

*Your Turn*

$7000 \div 1000 = 7$

$55000 \div 1000 = 55$

$290000 \div 1000 = 290$

**4 Solve missing number problems for dividing multiples of 10, 100 and 1000 by 10, 100 or 1000***Let's Learn*

$4000 \div \boxed{10} = 400$

$52000 \div \boxed{1000} = 52$

$830000 \div \boxed{100} = 8300$

*Your Turn*

$40000 \div \boxed{1000} = 40$

$50200 \div \boxed{100} = 502$

$525000 \div \boxed{10} = 52500$

**5 Divide using short division***Let's Learn*

$5862 \div 3 = 1954$

$5184 \div 6 = 864$

$9863 \div 7 = 1409$

*Your Turn*

$9764 \div 4 = 2441$

$7088 \div 8 = 886$

$9765 \div 9 = 1085$

**6 Divide using short division with remainders***Let's Learn*

$5862 \div 5 = 1172\ r2$

$4989 \div 9 = 554\ r3$

$8861 \div 6 = 1476\ r5$

*Your Turn*

$5481 \div 5 = 1096\ r1$

$4181 \div 7 = 597\ r2$

$9651 \div 8 = 1206\ r3$

**7 Solve division problems with missing digits***Let's Learn*

$$\begin{array}{r} \underline{1752} \\ 3 \overline{) 5256} \end{array}$$

$$\begin{array}{r} \underline{653} \\ 5 \overline{) 3265} \end{array}$$

$$\begin{array}{r} \underline{2306} \\ 4 \overline{) 9224} \end{array}$$

*Your Turn*

$$\begin{array}{r} \underline{1561} \\ 4 \overline{) 6244} \end{array}$$

$$\begin{array}{r} \underline{892} \\ 5 \overline{) 4460} \end{array}$$

$$\begin{array}{r} \underline{2707} \\ 3 \overline{) 8121} \end{array}$$



8 Divide a multiple of 10 by a multiple of 10

Let's Learn

$420 \div 70 = 6$	$360 \div 60 = 6$	$720 \div 90 = 8$
-------------------	-------------------	-------------------



Your Turn

$400 \div 80 = 5$	$490 \div 70 = 7$	$720 \div 60 = 12$
-------------------	-------------------	--------------------



9 Divide a multiple of 100 by a multiple of 10

Let's Learn

$600 \div 20 = 30$	$3500 \div 50 = 70$	$2700 \div 30 = 90$
--------------------	---------------------	---------------------



Your Turn

$900 \div 30 = 30$	$3500 \div 70 = 50$	$2400 \div 80 = 30$
--------------------	---------------------	---------------------



10 Divide a multiple of 100 by a multiple of 100

Let's Learn

$600 \div 200 = 3$	$3500 \div 500 = 7$	$2700 \div 300 = 9$
--------------------	---------------------	---------------------



Your Turn

$200 \div 200 = 1$	$3300 \div 300 = 11$	$6300 \div 700 = 9$
--------------------	----------------------	---------------------



11 Solve missing number multiplication problems using knowledge of multiples of 10 and 100

Let's Learn

$7 \times \boxed{400} = 2800$	$\boxed{7200} = 9 \times 800$	$\boxed{5} \times 90 = 450$
$\boxed{90} \times 7 = 630$	$\boxed{5} \times 300 = 1500$	$\boxed{300} = 6 \times 50$
$200 \times \boxed{700} = 140\,000$	$\boxed{30} \times 800 = 24\,000$	
$40 \times \boxed{30} = 1200$	$\boxed{500} \times 50 = 25\,000$	



Your Turn

$\boxed{70} \times 6 = 420$	$\boxed{9} \times 300 = 2700$	$\boxed{400} = 8 \times 50$
$\boxed{5} \times 90 = 450$	$6 \times \boxed{300} = 1800$	$\boxed{6400} = 8 \times 800$
$40 \times \boxed{40} = 1600$	$\boxed{400} \times 70 = 28\,000$	
$300 \times \boxed{600} = 180\,000$	$\boxed{40} \times 800 = 32\,000$	



12 Solve missing number division problems using knowledge of multiples of 10 and 100

Let's Learn

$3600 \div \boxed{600} = 6$	$\boxed{560} \div 8 = 70$	$\boxed{3000} \div 5 = 600$
$720 \div \boxed{90} = 8$	$\boxed{5600} \div 800 = 7$	$\boxed{320} \div 40 = 8$
$350\,000 \div \boxed{500} = 700$	$\boxed{18\,000} \div 200 = 90$	$\boxed{490\,000} \div 700 = 700$
$64\,000 \div \boxed{80} = 800$	$\boxed{1200} \div 60 = 20$	$2400 \div \boxed{40} = 60$



Your Turn

$\boxed{720} \div 8 = 900$	$4200 \div \boxed{600} = 7$	$490 \div \boxed{70} = 7$
$\boxed{1500} \div 5 = 300$	$\boxed{400} \div 50 = 8$	$\boxed{5600} \div 700 = 8$
$\boxed{12\,000} \div 300 = 40$	$\boxed{250\,000} \div 500 = 500$	$280\,000 \div \boxed{400} = 700$
$\boxed{4800} \div 60 = 80$	$72\,000 \div \boxed{90} = 800$	$2100 \div \boxed{30} = 70$



1 Identify multiples*Let's Learn*

Answer true or false for each statement below.

48 is a multiple of 3 **True**250 is a multiple of 100 **False**365 is a multiple of 9 **False**104 is a multiple of 8 **True***Your Turn*

Answer true or false for each statement below.

96 is a multiple of 4 **True**1400 is a multiple of 100 **True**357 is a multiple of 7 **True**416 is a multiple of 9 **False****2 Find multiples and the lowest common multiple of two numbers***Let's Learn*

Answer true or false for each statement below.

48 is a common multiple of 3 and 8. **True**104 is a common multiple of 8 and 9. **False**24 is a common multiple of 6 and 7. **False**24 is the lowest common multiple of 4 and 6. **False**36 is the lowest common multiple of 6 and 9. **False***Your Turn*

Answer true or false for each statement below.

56 is a common multiple of 2 and 7. **True**108 is a common multiple of 3 and 12. **True**27 is a common multiple of 3 and 6. **False**56 is the lowest common multiple of 7 and 8. **True**12 is the lowest common multiple of 4 and 6. **True****3 Identify factor pairs***Let's Learn*

Write all the factors of each number below.

12 **1, 2, 3, 4, 6, 12**16 **1, 2, 4, 8, 16**20 **1, 2, 4, 5, 10, 20***Your Turn*

Write all the factors of each number below.

15 **1, 3, 5, 15**25 **1, 5, 25**22 **1, 2, 11, 22****4 Find common factors and the highest common factor of two numbers***Let's Learn*

Write all the common factors of each pair of numbers below.

6 and 9 **1, 3**14 and 35 **1, 7**27 and 36 **1, 3, 9***Your Turn*

Write all the common factors of each pair of numbers below.

4 and 8 **1, 2, 4**22 and 33 **1, 11**21 and 56 **1, 7****5 Use factor pairs in mental calculations for multiplication***Let's Learn*

Use factor pairs to solve the multiplication questions below.

 $37 \times 18 = 666$ $21 \times 21 = 441$ $52 \times 32 = 1664$ *Your Turn*

Use factor pairs to solve the multiplication questions below.

 $17 \times 16 = 272$ $23 \times 21 = 483$ $72 \times 36 = 2592$

6 Identify prime numbers and composite numbers*Let's Learn*

Identify each of the numbers below as prime or composite.

171 **Composite**911 **Prime**427 **Composite***Your Turn*

Identify each of the numbers below as prime or composite.

267 **Composite**701 **Prime**941 **Composite****7 Find prime factors***Let's Learn*

Identify the prime factors of each of the numbers below.

70 **$7 \times 5 \times 2$** 75 **$5 \times 5 \times 3$** 100 **$5 \times 5 \times 2 \times 2$** *Your Turn*

Identify the prime factors of each of the numbers below.

12 **$3 \times 2 \times 2$** 30 **$5 \times 3 \times 2$** 90 **$5 \times 3 \times 3 \times 2$** **8 Identify square numbers***Let's Learn*

$7^2 + 4^2 = 65$

$10^2 - 3^2 = 91$

$8^2 - 4^2 = 48$

Your Turn

$8^2 + 5^2 = 89$

$10^2 - 5^2 = 75$

$7^2 - 6^2 = 13$

9 Find square numbers by squaring multiples of 10 or 100*Let's Learn*

$50^2 = 2500$

$90^2 = 8100$

$300^2 = 90\ 000$

$700^2 = 490\ 000$

$9^2 = 81$

$20^2 = 400$

$400^2 = 160\ 000$

$800^2 = 640\ 000$

Your Turn

$40^2 = 2500$

$80^2 = 6400$

$200^2 = 40\ 000$

$500^2 = 250\ 000$

$7^2 = 49$

$30^2 = 900$

$600^2 = 360\ 000$

$700^2 = 490\ 000$

10 Identify cube numbers*Let's Learn*

$2^3 = 8$

$3^3 = 27$

$4^3 = 64$

$5^3 = 125$

11 Find cube numbers using multiplication*Let's Learn*

$6^3 = 216$

$7^3 = 343$

$8^3 = 512$

$9^3 = 729$

1 Convert mixed numbers to improper fractions*Let's Learn*

Convert each mixed number to an improper fraction.

$$1\frac{1}{5} = \frac{6}{5}$$

$$2\frac{5}{6} = \frac{17}{6}$$

$$3\frac{5}{8} = \frac{29}{8}$$

Your Turn

Convert each mixed number to an improper fraction.

$$1\frac{1}{3} = \frac{4}{3}$$

$$2\frac{3}{5} = \frac{13}{5}$$

$$4\frac{3}{4} = \frac{19}{4}$$

2 Convert improper fractions to mixed numbers*Let's Learn*

Convert each improper fraction to a mixed number.

$$\frac{8}{5} = 1\frac{3}{5}$$

$$\frac{11}{3} = 3\frac{2}{3}$$

$$\frac{21}{8} = 2\frac{5}{8}$$

Your Turn

Convert each improper fraction to a mixed number.

$$\frac{7}{4} = 1\frac{3}{4}$$

$$\frac{14}{5} = 2\frac{4}{5}$$

$$\frac{22}{7} = 3\frac{1}{7}$$

3 Add fractions with the same denominator beyond 1 whole, writing the answer as a mixed number*Let's Learn*

$$\frac{4}{5} + \frac{2}{5} = \frac{6}{5} \text{ or } 1\frac{1}{5}$$

$$\frac{3}{4} + \frac{3}{4} = \frac{6}{4} \text{ or } 1\frac{2}{4}$$

$$\frac{7}{8} + \frac{5}{8} = \frac{12}{8} \text{ or } 1\frac{4}{8}$$

$$\frac{2}{6} + \frac{5}{6} = \frac{7}{6} \text{ or } 1\frac{1}{6}$$

Your Turn

$$\frac{5}{6} + \frac{2}{6} = \frac{7}{6} \text{ or } 1\frac{1}{6}$$

$$\frac{4}{5} + \frac{4}{5} = \frac{8}{5} \text{ or } 1\frac{3}{5}$$

$$\frac{6}{7} + \frac{5}{7} = \frac{11}{7} \text{ or } 1\frac{4}{7}$$

$$\frac{4}{8} + \frac{5}{8} = \frac{9}{8} \text{ or } 1\frac{1}{8}$$

4 Subtract a fraction from an improper fraction or mixed number with the same denominator and with 1 whole*Let's Learn*

$$1\frac{3}{5} - \frac{4}{5} = \frac{4}{5}$$

$$2\frac{2}{7} - \frac{5}{7} = \frac{4}{7}$$

$$1\frac{1}{4} - \frac{3}{4} = \frac{2}{4}$$

$$1\frac{1}{3} - \frac{2}{3} = \frac{2}{3}$$

Your Turn

$$1\frac{2}{7} - \frac{4}{7} = \frac{5}{7}$$

$$1\frac{1}{5} - \frac{2}{5} = \frac{4}{5}$$

$$1\frac{1}{8} - \frac{3}{8} = \frac{6}{8}$$

$$1\frac{2}{6} - \frac{5}{6} = \frac{3}{6}$$

5 Solve missing number problems for addition and subtraction of fractions with the same denominator beyond 1*Let's Learn*

$$1\frac{1}{5} - \boxed{\frac{4}{5}} = \frac{2}{5}$$

$$\boxed{1\frac{1}{7}} - \frac{3}{7} = \frac{5}{7}$$

$$\boxed{\frac{4}{6}} + \frac{5}{6} = 1\frac{3}{6}$$

Your Turn

$$1\frac{1}{3} - \boxed{\frac{2}{3}} = \frac{2}{3}$$

$$\boxed{1\frac{1}{4}} - \frac{3}{4} = \frac{2}{4}$$

$$\boxed{\frac{7}{9}} + \frac{4}{9} = 1\frac{2}{9}$$

6 Add a fraction to a whole number and subtract a fraction from a whole number*Let's Learn*

$$3 + \frac{3}{7} = 3\frac{3}{7}$$

$$1 - \frac{1}{4} = \frac{3}{4}$$

$$1 - \frac{2}{5} = \frac{3}{5}$$

$$4 - \frac{7}{8} = 3\frac{1}{8}$$

$$4 - \frac{1}{4} = 3\frac{3}{4}$$

$$3 - \frac{2}{5} = 2\frac{3}{5}$$

Your Turn

$$5 + \frac{2}{3} = 5\frac{2}{3}$$

$$1 - \frac{1}{5} = \frac{4}{5}$$

$$1 - \frac{5}{7} = \frac{2}{7}$$

$$3 - \frac{5}{6} = 2\frac{1}{6}$$

$$3 - \frac{1}{5} = 2\frac{4}{5}$$

$$5 - \frac{5}{7} = 4\frac{2}{7}$$

7 Add a fraction to a mixed number with the same denominator, without regrouping*Let's Learn*

$1\frac{3}{10} + \frac{4}{10} = 1\frac{7}{10}$	$2\frac{2}{5} + \frac{2}{5} = 2\frac{4}{5}$	$1\frac{3}{8} + \frac{4}{8} = 1\frac{7}{8}$
------------------------------------------------	---------------------------------------------	---------------------------------------------

*Your Turn*

$1\frac{5}{12} + \frac{6}{12} = 1\frac{11}{12}$	$2\frac{2}{4} + \frac{1}{4} = 2\frac{3}{4}$	$2\frac{1}{7} + \frac{4}{7} = 2\frac{5}{7}$
-------------------------------------------------	---------------------------------------------	---------------------------------------------

**8 Add a fraction to a mixed number with the same denominator, regrouping to make 1 more whole***Let's Learn*

Answer the questions below by regrouping to make 1 more whole.		
$\frac{2}{3} + \frac{1}{3} = 2$	$\frac{3}{5} + \frac{4}{5} = 3\frac{2}{5}$	$1\frac{3}{4} + \frac{3}{4} = 2\frac{2}{4}$

*Your Turn*

Answer the questions below by regrouping to make 1 more whole.		
$\frac{2}{5} + \frac{3}{5} = 3$	$\frac{3}{4} + \frac{2}{4} = 3\frac{1}{4}$	$1\frac{3}{6} + \frac{5}{6} = 2\frac{2}{6}$

**9 Add a fraction to a mixed number with the same denominator by converting to an improper fraction***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

*Your Turn*

Now answer the questions above by converting mixed numbers to improper fractions.

**10 Add mixed numbers with the same denominator, without regrouping***Let's Learn*

$2\frac{3}{5} + 2\frac{1}{5} = 4\frac{4}{5}$	$3\frac{4}{7} + 1\frac{1}{7} = 4\frac{5}{7}$
----------------------------------------------	----------------------------------------------

*Your Turn*

$3\frac{1}{3} + 2\frac{1}{3} = 5\frac{2}{3}$	$2\frac{4}{9} + 1\frac{1}{9} = 3\frac{5}{9}$
----------------------------------------------	----------------------------------------------

**11 Add mixed numbers with the same denominator, regrouping to make 1 more whole***Let's Learn*

Answer the questions below by regrouping to make 1 more whole.	
$\frac{4}{5} + 2\frac{2}{5} = 5\frac{1}{5}$	$2\frac{3}{4} + 1\frac{3}{4} = 4\frac{2}{4}$

*Your Turn*

Answer the questions below by regrouping to make 1 more whole.	
$2\frac{3}{4} + 1\frac{2}{4} = 4\frac{1}{4}$	$\frac{4}{5} + 2\frac{3}{5} = 5\frac{2}{5}$

**12 Add mixed numbers with the same denominator by converting to improper fractions***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

*Your Turn*

Now answer the questions above by converting mixed numbers to improper fractions.



13 Subtract a fraction from a mixed number with the same denominator, without regrouping*Let's Learn*

$1\frac{9}{10} - \frac{4}{10} = 1\frac{5}{10}$	$2\frac{4}{5} - \frac{3}{5} = 2\frac{1}{5}$	$1\frac{5}{8} - \frac{3}{8} = 1\frac{2}{8}$
------------------------------------------------	---------------------------------------------	---------------------------------------------

*Your Turn*

$1\frac{11}{12} - \frac{9}{12} = 1\frac{2}{12}$	$3\frac{2}{5} - \frac{1}{5} = 3\frac{1}{5}$	$1\frac{6}{7} - \frac{3}{7} = 1\frac{3}{7}$
-------------------------------------------------	---------------------------------------------	---------------------------------------------

**14 Subtract a fraction from a mixed number with the same denominator, regrouping to make 1 fewer whole***Let's Learn*

Answer the questions below by regrouping to make 1 fewer whole.		
$2\frac{1}{3} - \frac{2}{3} = 1\frac{2}{3}$	$3\frac{1}{5} - \frac{4}{5} = 2\frac{2}{5}$	$2\frac{1}{4} - \frac{3}{4} = 1\frac{2}{4}$

*Your Turn*

Answer the questions below by regrouping to make 1 fewer whole.		
$2\frac{1}{4} - \frac{2}{4} = 1\frac{3}{4}$	$3\frac{3}{6} - \frac{5}{6} = 2\frac{4}{6}$	$2\frac{1}{5} - \frac{3}{5} = 1\frac{3}{5}$

**15 Subtract a fraction from a mixed number with the same denominator by converting to an improper fraction***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

*Your Turn*

Now answer the questions above by converting mixed numbers to improper fractions.

**16 Subtract mixed numbers with the same denominator, without regrouping***Let's Learn*

$2\frac{3}{5} - 1\frac{1}{5} = 1\frac{2}{5}$	$3\frac{5}{7} - 2\frac{2}{7} = 1\frac{3}{7}$
----------------------------------------------	----------------------------------------------

*Your Turn*

$3\frac{5}{8} - 1\frac{1}{8} = 2\frac{4}{8}$	$2\frac{5}{6} - 1\frac{1}{6} = 1\frac{4}{6}$
----------------------------------------------	----------------------------------------------

**17 Subtract mixed numbers with the same denominator, regrouping to make 1 fewer whole***Let's Learn*

Answer the questions below by regrouping to make 1 fewer whole.	
$2\frac{2}{5} - 1\frac{4}{5} = \frac{3}{5}$	$3\frac{1}{4} - 1\frac{3}{4} = 1\frac{2}{4}$

*Your Turn*

Answer the questions below by regrouping to make 1 fewer whole.	
$2\frac{1}{8} - 1\frac{7}{8} = \frac{2}{8}$	$3\frac{2}{5} - 1\frac{4}{5} = 1\frac{3}{5}$

**18 Subtract mixed numbers with the same denominator by converting to improper fractions***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

*Your Turn*

Now answer the questions above by converting mixed numbers to improper fractions.

**19 Find equivalent improper fractions***Let's Learn*

$\frac{5}{3} = \frac{15}{9}$	$\frac{11}{5} = \frac{22}{10}$	$\frac{20}{12} = \frac{5}{3}$
------------------------------	--------------------------------	-------------------------------

*Your Turn*

$\frac{5}{2} = \frac{20}{8}$	$\frac{11}{7} = \frac{22}{14}$	$\frac{21}{12} = \frac{7}{4}$
------------------------------	--------------------------------	-------------------------------



20 Compare fractions with denominators as common multiples*Let's Learn*

Write < or >.

$\frac{3}{4} < \frac{7}{8}$

$\frac{11}{15} > \frac{3}{5}$

$\frac{2}{3} > \frac{7}{12}$

Your Turn

Write < or >.

$\frac{1}{3} > \frac{2}{9}$

$\frac{13}{21} < \frac{5}{7}$

$\frac{5}{8} < \frac{17}{24}$

21 Compare improper fractions with denominators as common multiples*Let's Learn*

Write < or >.

$\frac{5}{4} > \frac{9}{8}$

$\frac{4}{3} < \frac{17}{12}$

Your Turn

Write < or >.

$\frac{7}{4} > \frac{20}{12}$

$\frac{29}{15} > \frac{5}{3}$

22 Order fractions with denominators as common multiples*Let's Learn*

Order these fractions from smallest to largest.

$\frac{7}{10}, \frac{3}{5}, \frac{13}{20}, \frac{3}{4}$

$\frac{3}{5}$

$\frac{13}{20}$

$\frac{7}{10}$

$\frac{3}{4}$

Your Turn

Order these fractions from smallest to largest.

$\frac{13}{24}, \frac{7}{12}, \frac{3}{8}, \frac{5}{6}$

$\frac{3}{8}$

$\frac{13}{24}$

$\frac{7}{12}$

$\frac{5}{6}$

23 Add fractions with denominators as common multiples within 1*Let's Learn*

$\frac{3}{4} + \frac{1}{8} = \frac{7}{8}$

$\frac{2}{5} + \frac{2}{15} = \frac{8}{15}$

$\frac{7}{12} + \frac{1}{4} = \frac{10}{12}$

Your Turn

$\frac{2}{3} + \frac{1}{9} = \frac{7}{9}$

$\frac{3}{5} + \frac{7}{25} = \frac{22}{25}$

$\frac{8}{27} + \frac{1}{9} = \frac{11}{27}$

24 Subtract fractions with denominators as common multiples within 1*Let's Learn*

$\frac{3}{4} - \frac{3}{8} = \frac{3}{8}$

$\frac{4}{5} - \frac{3}{20} = \frac{13}{20}$

$\frac{11}{12} - \frac{1}{4} = \frac{8}{12}$

Your Turn

$\frac{1}{2} - \frac{1}{8} = \frac{3}{8}$

$\frac{3}{4} - \frac{5}{28} = \frac{16}{28}$

$\frac{17}{18} - \frac{2}{3} = \frac{5}{18}$

25 Solve missing number problems for addition and subtraction of fractions with denominators as common multiples within 1*Let's Learn*

$\frac{3}{5} + \frac{3}{10} = \frac{9}{10}$

$\frac{3}{4} - \frac{5}{8} = \frac{1}{8}$

$\frac{8}{9} - \frac{2}{9} = \frac{2}{3}$

Your Turn

$\frac{5}{6} + \frac{1}{12} = \frac{11}{12}$

$\frac{2}{3} - \frac{2}{9} = \frac{4}{9}$

$\frac{7}{8} - \frac{5}{8} = \frac{1}{4}$

26 Add fractions with denominators as common multiples beyond 1 whole, writing answers as mixed numbers*Let's Learn*

$$\frac{4}{5} + \frac{3}{10} = \frac{11}{10} \text{ or } 1\frac{1}{10}$$

$$\frac{5}{12} + \frac{3}{4} = \frac{14}{12} \text{ or } 1\frac{2}{12}$$

*Your Turn*

$$\frac{4}{5} + \frac{4}{15} = \frac{16}{15} \text{ or } 1\frac{1}{15}$$

$$\frac{9}{21} + \frac{6}{7} = \frac{27}{21} \text{ or } 1\frac{6}{21}$$

**27 Subtract a fraction from an improper fraction or mixed number with denominators as common multiples and with 1 whole***Let's Learn*

$$1\frac{1}{2} - \frac{7}{10} = \frac{8}{10}$$

$$1\frac{1}{3} - \frac{5}{6} = \frac{3}{6}$$

$$1\frac{1}{8} - \frac{1}{4} = \frac{7}{8}$$

*Your Turn*

$$1\frac{1}{2} - \frac{7}{12} = \frac{11}{12}$$

$$1\frac{2}{3} - \frac{8}{9} = \frac{7}{9}$$

$$1\frac{1}{8} - \frac{3}{4} = \frac{3}{8}$$

**28 Solve missing number problems for addition and subtraction of fractions with denominators as common multiples beyond 1***Let's Learn*

$$1\frac{1}{6} - \boxed{\frac{3}{6}} = \frac{2}{3}$$

$$\boxed{1\frac{3}{8}} - \frac{3}{4} = \frac{5}{8}$$

$$\boxed{\frac{4}{6}} + \frac{5}{6} = 1\frac{1}{2}$$

*Your Turn*

$$1\frac{1}{8} - \boxed{\frac{7}{8}} = \frac{1}{4}$$

$$\boxed{1\frac{2}{9}} - \frac{2}{3} = \frac{5}{9}$$

$$\boxed{\frac{3}{4}} + \frac{3}{4} = 1\frac{1}{2}$$

**29 Add a fraction to a mixed number with denominators as common multiples, without regrouping***Let's Learn*

$$1\frac{3}{5} + \frac{3}{10} = 1\frac{9}{10}$$

$$2\frac{2}{3} + \frac{1}{9} = 2\frac{7}{9}$$

$$1\frac{3}{8} + \frac{1}{2} = 1\frac{7}{8}$$

*Your Turn*

$$1\frac{1}{3} + \frac{7}{15} = 1\frac{12}{15}$$

$$2\frac{1}{2} + \frac{1}{6} = 2\frac{4}{6}$$

$$1\frac{2}{9} + \frac{1}{3} = 1\frac{5}{9}$$

**30 Add a fraction to a mixed number with denominators as common multiples, regrouping to make 1 more whole***Let's Learn*

Answer the questions below by regrouping to make 1 more whole.

$$1\frac{4}{5} + \frac{7}{10} = 2\frac{5}{10}$$

$$2\frac{7}{8} + \frac{1}{2} = 3\frac{3}{8}$$

*Your Turn*

Answer the questions below by regrouping to make 1 more whole.

$$1\frac{2}{3} + \frac{7}{15} = 2\frac{2}{15}$$

$$2\frac{5}{8} + \frac{3}{4} = 3\frac{3}{8}$$

**31 Add a fraction to a mixed number with denominators as common multiples by converting to an improper fraction***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

Your Turn

Now answer the questions above by converting mixed numbers to improper fractions.



32 Add mixed numbers with denominators as common multiples, without regrouping*Let's Learn*

$$2\frac{1}{6} + 2\frac{2}{3} = 4\frac{5}{6}$$

$$2\frac{1}{2} + 1\frac{1}{8} = 3\frac{5}{8}$$

*Your Turn*

$$2\frac{1}{9} + 1\frac{2}{3} = 3\frac{7}{9}$$

$$2\frac{1}{2} + 2\frac{1}{6} = 4\frac{4}{6}$$

**33 Add mixed numbers with denominators as common multiples, regrouping to make 1 more whole***Let's Learn*

Answer the questions below by regrouping to make 1 more whole.

$$2\frac{3}{4} + 2\frac{7}{12} = 5\frac{4}{12}$$

$$2\frac{9}{10} + 1\frac{1}{2} = 4\frac{4}{10}$$

*Your Turn*

Answer the questions below by regrouping to make 1 more whole.

$$2\frac{5}{6} + 2\frac{7}{18} = 5\frac{4}{18}$$

$$2\frac{11}{12} + 1\frac{2}{3} = 4\frac{7}{12}$$

**34 Add mixed numbers with denominators as common multiples by converting to improper fractions***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

Your Turn

Now answer the questions above by converting mixed numbers to improper fractions.

**35 Subtract a fraction from a mixed number with denominators as common multiples, without regrouping***Let's Learn*

$$1\frac{4}{5} - \frac{7}{10} = 1\frac{1}{10}$$

$$2\frac{1}{3} - \frac{1}{12} = 2\frac{3}{12}$$

$$1\frac{5}{6} - \frac{1}{2} = 1\frac{2}{6}$$

*Your Turn*

$$1\frac{3}{4} - \frac{5}{12} = 1\frac{4}{12}$$

$$2\frac{2}{3} - \frac{4}{15} = 2\frac{6}{15}$$

$$1\frac{7}{8} - \frac{1}{4} = 1\frac{5}{8}$$

**36 Subtract a fraction from a mixed number with denominators as common multiples, regrouping to make 1 fewer whole***Let's Learn*

Answer the questions below by regrouping to make 1 fewer whole.

$$2\frac{1}{5} - \frac{7}{15} = 1\frac{11}{15}$$

$$2\frac{3}{8} - \frac{1}{2} = 1\frac{7}{8}$$

*Your Turn*

Answer the questions below by regrouping to make 1 fewer whole.

$$2\frac{1}{2} - \frac{9}{14} = 1\frac{12}{14}$$

$$3\frac{1}{6} - \frac{1}{2} = 2\frac{4}{6}$$

**37 Subtract a fraction from a mixed number with denominators as common multiples by converting to improper fractions***Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

Your Turn

Now answer the questions above by converting mixed numbers to improper fractions.



38 Subtract mixed numbers with denominators as common multiples, without regrouping*Let's Learn*

$$3\frac{5}{6} - 1\frac{2}{3} = 2\frac{1}{6}$$

$$2\frac{1}{2} - 1\frac{1}{8} = 1\frac{3}{8}$$

Your Turn

$$2\frac{5}{9} - 1\frac{1}{3} = 1\frac{2}{9}$$

$$3\frac{1}{2} - 1\frac{1}{4} = 2\frac{1}{4}$$

39 Subtract mixed numbers with denominators as common multiples, regrouping to make 1 fewer whole*Let's Learn*

Answer the questions below by regrouping to make 1 fewer whole.

$$2\frac{1}{4} - 1\frac{11}{12} = \frac{4}{12}$$

$$3\frac{3}{10} - 1\frac{1}{2} = 1\frac{8}{10}$$

Your Turn

Answer the questions below by regrouping to make 1 fewer whole.

$$2\frac{1}{3} - 1\frac{7}{12} = \frac{9}{12}$$

$$4\frac{1}{10} - 1\frac{1}{5} = 2\frac{9}{10}$$

40 Subtract mixed numbers with denominators as common multiples by converting to improper fractions*Let's Learn*

Now answer the questions above by converting mixed numbers to improper fractions.

Your Turn

Now answer the questions above by converting mixed numbers to improper fractions.

41 Express a remainder as a fraction*Let's Learn*

For each question below, write the remainder as a fraction.

$$10 \div 3 = 3\frac{1}{3}$$

$$10 \div 4 = 2\frac{2}{4}$$

$$709 \div 5 = 141\frac{4}{5}$$

$$709 \div 6 = 118\frac{1}{6}$$

Your Turn

For each question below, write the remainder as a fraction.

$$13 \div 3 = 4\frac{1}{3}$$

$$15 \div 4 = 3\frac{3}{4}$$

$$802 \div 5 = 160\frac{2}{5}$$

$$716 \div 7 = 102\frac{2}{7}$$

42 Find a unit fraction of a number, writing the remainder as a fraction*Let's Learn*

For each question below, write the answer as a mixed number.

$$\frac{1}{5} \text{ of } 13 = 2\frac{3}{5}$$

$$\frac{1}{4} \text{ of } 17 = 4\frac{1}{4}$$

$$\frac{1}{5} \text{ of } 22 = 4\frac{2}{5}$$

Your Turn

For each question below, write the answer as a mixed number.

$$\frac{1}{3} \text{ of } 11 = 3\frac{2}{3}$$

$$\frac{1}{5} \text{ of } 17 = 3\frac{2}{5}$$

$$\frac{1}{7} \text{ of } 22 = 3\frac{1}{7}$$

43 Find a non-unit fraction of a number, writing the answer as a mixed number*Let's Learn*

For each question below, write the answer as a mixed number.

$$\frac{3}{4} \text{ of } 21 = 15\frac{3}{4}$$

$$\frac{2}{5} \text{ of } 23 = 9\frac{1}{5}$$

$$\frac{2}{3} \text{ of } 17 = 11\frac{1}{3}$$

Your Turn

For each question below, write the answer as a mixed number.

$$\frac{7}{8} \text{ of } 11 = 9\frac{5}{8}$$

$$\frac{3}{4} \text{ of } 23 = 17\frac{1}{4}$$

$$\frac{3}{5} \text{ of } 17 = 10\frac{1}{5}$$

44 Multiply a fraction by a whole number*Let's Learn*

$\frac{3}{4} \times 5 = 3\frac{3}{4}$	$\frac{2}{3} \times 6 = 4$
---------------------------------------	----------------------------

*Your Turn*

$\frac{5}{6} \times 5 = 4\frac{1}{6}$	$\frac{3}{4} \times 7 = 5\frac{1}{4}$
---------------------------------------	---------------------------------------

**45 Multiply a mixed number by a whole number by partitioning***Let's Learn*

Complete the questions below by partitioning whole numbers and fractions.



$2\frac{3}{4} \times 3 = 8\frac{1}{4}$	$2\frac{1}{4} \times 6 = 13\frac{2}{4}$ or $13\frac{1}{2}$
----------------------------------------	------------------------------------------------------------

$1\frac{1}{3} \times 60 = 80$	$13 \times 1\frac{1}{2} = 19\frac{1}{2}$
-------------------------------	------------------------------------------

Your Turn

Complete the questions below by partitioning whole numbers and fractions.



$3\frac{4}{5} \times 4 = 15\frac{1}{5}$	$2\frac{2}{3} \times 7 = 18\frac{2}{3}$
-----------------------------------------	-----------------------------------------

$1\frac{1}{4} \times 40 = 50$	$25 \times 1\frac{1}{2} = 37\frac{1}{2}$
-------------------------------	------------------------------------------

46 Multiply a mixed number by a whole number using improper fractions*Let's Learn*

Now complete the questions above by converting each mixed number to an improper fraction.

*Your Turn*

Now complete the questions above by converting each mixed number to an improper fraction.



1 Write unit fractions as decimals

Let's Learn

Write each fraction as a decimal

$$\frac{1}{2} = 0.5$$

$$\frac{1}{4} = 0.25$$

$$\frac{1}{5} = 0.2$$

$$\frac{1}{50} = 0.02$$



2 Write non-unit fractions as decimals

Let's Learn

Write each fraction as a decimal

$$\frac{3}{5} = 0.6$$

$$\frac{3}{4} = 0.75$$

$$\frac{4}{25} = 0.16$$

$$\frac{12}{50} = 0.24$$



Your Turn

Write each fraction as a decimal

$$\frac{4}{5} = 0.8$$

$$\frac{2}{4} = 0.5$$

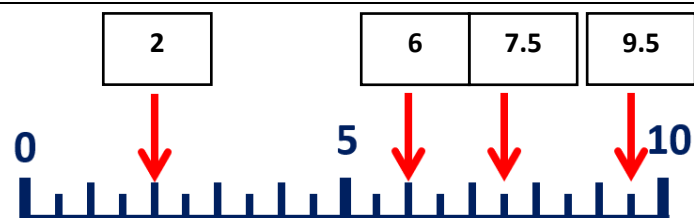
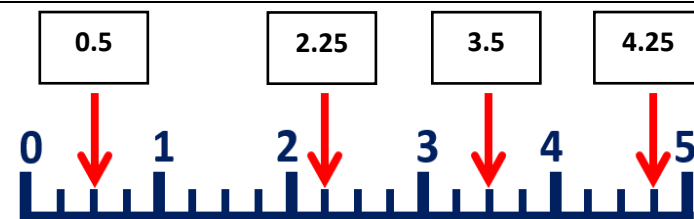
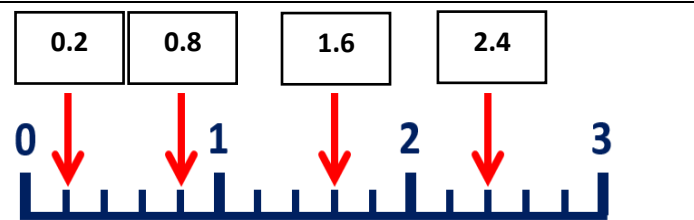
$$\frac{7}{25} = 0.28$$

$$\frac{9}{50} = 0.18$$

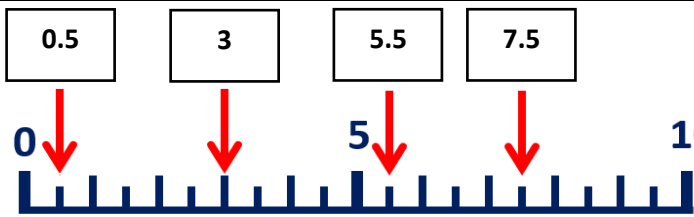
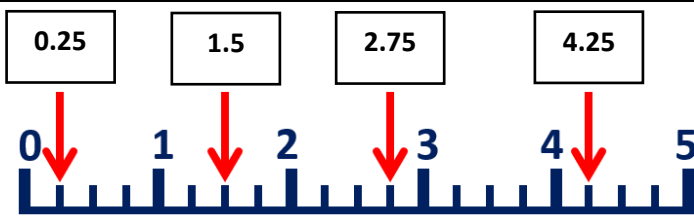
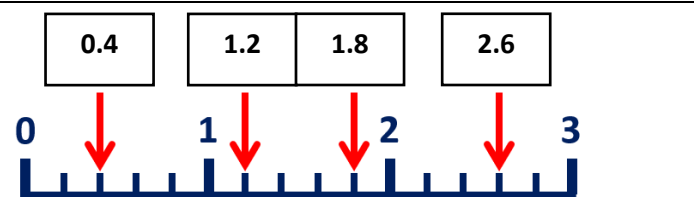


3 Locate decimals on fractional number lines

Let's Learn



Your Turn



4 Recognise tenths, hundredths and thousandths

Let's Learn

Look at this number: 294.35	Look at this number: 813.465
Write the digit in the tens place. <input type="text" value="9"/>	Write the digit in the hundredths place. <input type="text" value="3"/>
Write the digit in the tenths place. <input type="text" value="3"/>	Write the digit in the hundreds place. <input type="text" value="8"/>
Write the value of the digit 5. <input type="text" value="0.05"/>	Write the value of the digit 5. <input type="text" value="0.005"/>

Your Turn

Look at this number: 394.512	Look at this number: 1432.587
Write the digit in the ones place. <input type="text" value="4"/>	Write the digit in the tenths place. <input type="text" value="5"/>
Write the digit in the thousandths place. <input type="text" value="2"/>	Write the digit in the thousands place. <input type="text" value="1"/>
Write the value of the digit 9. <input type="text" value="90"/>	Write the value of the digit 8. <input type="text" value="0.08"/>

5 Convert decimal tenths, hundredths and thousandths to fractions

Let's Learn

Write these decimals as fractions.					
$0.9 = \frac{9}{10}$	$0.09 = \frac{9}{100}$	$0.009 = \frac{9}{1000}$	$0.89 = \frac{89}{100}$	$0.089 = \frac{89}{1000}$	$0.389 = \frac{389}{1000}$

Your Turn

Write these decimals as fractions.					
$0.7 = \frac{7}{10}$	$0.07 = \frac{7}{100}$	$0.007 = \frac{7}{1000}$	$0.45 = \frac{45}{100}$	$0.045 = \frac{45}{1000}$	$0.456 = \frac{456}{1000}$

6 Convert fractional tenths, hundredths and thousandths to decimals

Let's Learn

Write these fractions as decimals.					
$\frac{3}{10} = 0.3$	$\frac{3}{100} = 0.03$	$\frac{3}{1000} = 0.003$	$\frac{54}{100} = 0.54$	$\frac{54}{1000} = 0.054$	$\frac{543}{1000} = 0.543$

Your Turn

Write these fractions as decimals.					
$\frac{4}{10} = 0.4$	$\frac{4}{100} = 0.04$	$\frac{4}{1000} = 0.004$	$\frac{76}{100} = 0.76$	$\frac{76}{1000} = 0.076$	$\frac{176}{1000} = 0.176$

7 Recognise equivalent fractions with tenths, hundredths and thousandths

Let's Learn

Write the equivalent number of tenths and hundredths and in decimal form.					
$\frac{700}{1000} = \frac{70}{100} = \frac{7}{10} = \frac{0.7}{100}$	$\frac{70}{1000} = \frac{7}{100} = \frac{0.07}{100}$				

Your Turn

Write the equivalent number of tenths and hundredths and in decimal form.					
$\frac{300}{1000} = \frac{30}{100} = \frac{3}{10} = \frac{0.3}{100}$	$\frac{30}{1000} = \frac{3}{100} = \frac{0.03}{100}$				

8 Partition numbers with up to three decimal places*Let's Learn*

Partition each decimal into tenths, hundredths and thousandths.

$$0.158 = 0.1 + 0.05 + 0.008 \text{ or } \frac{1}{10} + \frac{5}{100} + \frac{8}{1000}$$

$$0.629 = 0.6 + 0.02 + 0.009 \text{ or } \frac{6}{10} + \frac{2}{100} + \frac{9}{1000}$$

Your Turn

Partition each decimal into tenths, hundredths and thousandths.

$$0.629 = 0.6 + 0.02 + 0.009 \text{ or } \frac{6}{10} + \frac{2}{100} + \frac{9}{1000}$$

$$0.801 = 0.8 + 0.001 \text{ or } \frac{8}{10} + \frac{1}{1000}$$

9 Convert decimals to mixed numbers*Let's Learn*

Write these decimals as mixed numbers.

$$5.4 = 5\frac{4}{10}$$

$$5.04 = 5\frac{4}{100}$$

$$5.004 = 5\frac{4}{1000}$$

$$6.24 = 6\frac{24}{100}$$

$$7.024 = 7\frac{24}{1000}$$

$$7.124 = 7\frac{124}{1000}$$

Your Turn

Write these decimals as mixed numbers.

$$2.2 = 2\frac{2}{10}$$

$$2.02 = 2\frac{2}{100}$$

$$2.002 = 2\frac{2}{1000}$$

$$5.55 = 5\frac{55}{100}$$

$$5.055 = 5\frac{55}{1000}$$

$$5.555 = 5\frac{555}{1000}$$

10 Convert mixed numbers to decimals*Let's Learn*

Write these mixed numbers as decimals.

$$1\frac{2}{10} = 1.2$$

$$1\frac{2}{100} = 1.02$$

$$1\frac{2}{1000} = 1.002$$

$$4\frac{32}{100} = 4.32$$

$$5\frac{32}{1000} = 5.032$$

$$6\frac{321}{1000} = 6.321$$

Your Turn

Write these mixed numbers as decimals.

$$1\frac{5}{10} = 1.5$$

$$1\frac{5}{100} = 1.05$$

$$1\frac{5}{1000} = 1.005$$

$$4\frac{30}{100} = 4.3$$

$$4\frac{30}{1000} = 4.03$$

$$4\frac{300}{1000} = 4.3$$

11 Understand zeros as placeholders in decimals*Let's Learn*

Write each number.

3 tens and 3 hundredths = **30.03**

3 thousands, 3 tens,

3 tenths and 3 thousandths = **3030.303***Your Turn*

Write each number.

4 tens and 4 hundredths = **40.04**

4 thousands, 4 tens,

4 tenths and 4 thousandths = **4040.404**

12 Count on in thousandths*Let's Learn*

For the questions below, write the next seven numbers, counting in thousandths.

0.623, 0.624, 0.625,	0.626	0.627	0.628	0.629	0.63	0.631	0.632
0.795, 0.796, 0.797,	0.798	0.799	0.8	0.801	0.802	0.803	0.804
2.593, 2.594, 2.595,	2.596	2.597	2.598	2.599	2.6	2.601	2.602
1.995, 1.996, 1.997,	1.998	1.999	2	2.001	2.002	2.003	2.004

Your Turn

For the questions below, write the next seven numbers, counting in thousandths.

0.504, 0.505, 0.506,	0.507	0.508	0.509	0.51	0.511	0.512	0.513
0.893, 0.894, 0.895,	0.896	0.897	0.898	0.899	0.9	0.901	0.902
1.293, 1.294, 1.295,	1.296	1.297	1.298	1.299	1.3	1.301	1.302
0.995, 0.996, 0.997,	0.998	0.999	1	1.001	1.002	1.003	1.004

13 Count back in thousandths*Let's Learn*

For the questions below, write the next seven numbers, counting in thousandths.

0.537, 0.536, 0.535,	0.534	0.533	0.532	0.531	0.53	0.529	0.528
0.905, 0.904, 0.903,	0.902	0.901	0.9	0.899	0.898	0.897	0.896
3.507, 3.506, 3.505,	3.504	0.503	0.502	0.501	0.5	0.499	0.498
1.005, 1.004, 1.003,	1.002	1.001	1	0.999	0.998	0.997	0.996

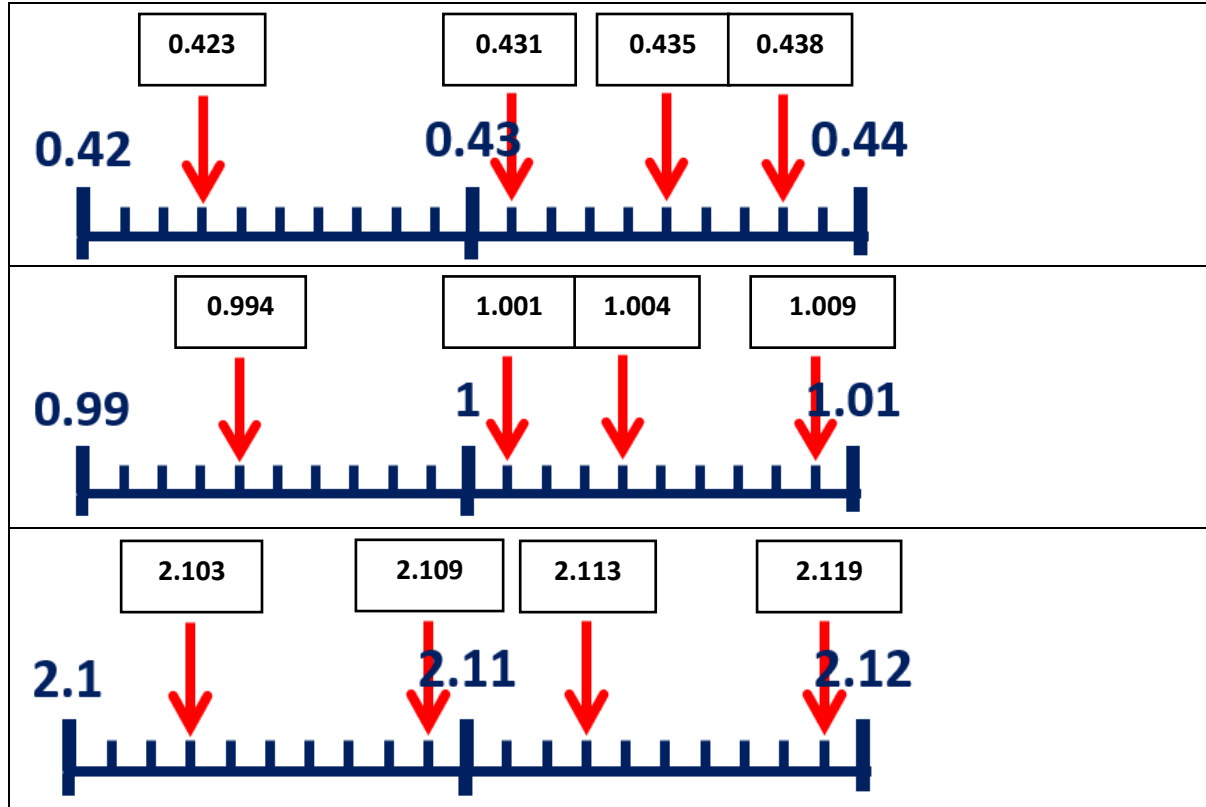
Your Turn

For the questions below, write the next seven numbers, counting in thousandths.

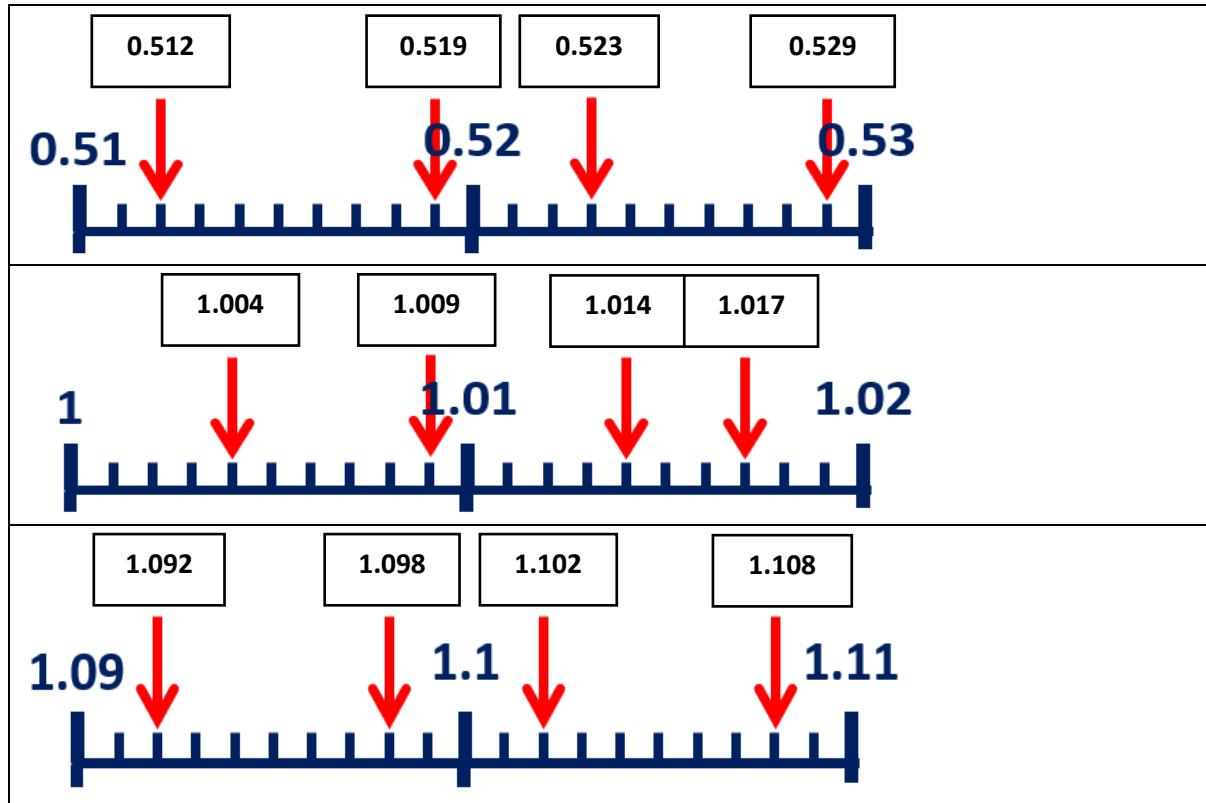
0.616, 0.615, 0.614,	0.613	0.612	0.611	0.61	0.609	0.608	0.607
0.107, 0.106, 0.105,	0.104	0.103	0.102	0.101	0.1	0.009	0.008
1.627, 1.626, 1.625,	1.624	1.623	1.622	1.621	1.62	1.619	1.618
3.004, 3.003, 3.002,	3.001	3	2.999	2.998	2.997	2.996	2.995

14 Locate thousandths on a number line

Let's Learn



Your Turn



15 Compare numbers with up to three decimal places

Let's Learn

Write > or < in each box.

5.298 > 5.289	34.2 > 30.993	1.405 < 1.44	2.9 > 2.099
---------------	---------------	--------------	-------------



Your Turn

Write > or < in each box.

0.362 > 0.236	1.292 < 30.9	0.605 < 0.65	3.099 < 3.8
---------------	--------------	--------------	-------------



16 Order decimals*Let's Learn*

Order each set of numbers from smallest to largest.

0.34 0.3 0.403 0.344 0.43

0.3**0.34****0.344****0.403****0.43**

4 3.94 4.03 4.004 3.499

3.499**3.94****4****4.004****4.03***Your Turn*

Order each set of numbers from smallest to largest.

0.5 0.505 0.055 0.05 0.55

0.05**0.055****0.5****0.505****0.55**

4.4 4.34 4.034 4.04 4.434

4.034**4.04****4.34****4.4****4.434****17 Add numbers with up to three decimal places***Let's Learn*

$5.87 + 3.123 = \mathbf{8.993}$

$19.36 + 35.816 = \mathbf{55.176}$

$5.871 + 3.2 = \mathbf{9.071}$

Your Turn

$3.8 + 2.155 = \mathbf{5.995}$

$17.765 + 13.44 = \mathbf{31.205}$

$7.709 + 0.7 = \mathbf{8.409}$

18 Subtract numbers with up to three decimal places*Let's Learn*

$37.8 - 14.671 = \mathbf{23.129}$

$36.909 - 20.67 = \mathbf{16.239}$

$6 - 5.738 = \mathbf{0.262}$

Your Turn

$45.9 - 13.363 = \mathbf{32.537}$

$25.159 - 10.9 = \mathbf{14.259}$

$7 - 6.519 = \mathbf{0.481}$

19 Make decimal number bonds to 1*Let's Learn*

$0.294 + \mathbf{0.706} = 1$

$0.538 + \mathbf{0.462} = 1$

Your Turn

$0.891 + \mathbf{0.109} = 1$

$0.277 + \mathbf{0.723} = 1$

20 Solve missing number decimal addition and subtraction problems*Let's Learn*

$\mathbf{38.953} = 29.5 + 9.453$

$\mathbf{12.426} + 2.704 = 14.5$

$\mathbf{4.902} - 1.082 = 3.82$

$4.04 - \mathbf{0.062} = 3.978$

Your Turn

$\mathbf{22.466} = 13.76 + 8.706$

$\mathbf{26.099} + 2.601 = 28.7$

$\mathbf{6.155} - 1.055 = 5.1$

$6.045 - \mathbf{2.095} = 3.95$

21 Round decimals to the nearest whole number*Let's Learn*

Round the numbers below to the nearest whole number.

$2.3 \approx 2$

$3.9 \approx 4$

$7.08 \approx 7$

$5.544 \approx 6$

*Your Turn*

Round the numbers below to the nearest whole number.

$4.1 \approx 4$

$0.6 \approx 1$

$4.72 \approx 5$

$6.155 \approx 6$

**22 Round decimals to the nearest tenth***Let's Learn*

Round the numbers below to the nearest tenth.

$2.36 \approx 2.4$

$2.63 \approx 2.6$

$4.808 \approx 4.8$

$6.464 \approx 6.5$

*Your Turn*

Round the numbers below to the nearest tenth.

$4.45 \approx 4.5$

$4.54 \approx 4.5$

$2.362 \approx 2.4$

$5.088 \approx 5.1$

**23 Round decimals to the nearest hundredth***Let's Learn*

Round the numbers below to the nearest hundredth.

$0.381 \approx 0.38$

$1.405 \approx 1.41$

$5.598 \approx 5.6$

$6.107 \approx 6.11$

*Your Turn*

Round the numbers below to the nearest hundredth.

$0.737 \approx 0.74$

$2.508 \approx 2.51$

$5.704 \approx 5.7$

$6.183 \approx 6.18$

**24 Divide decimals by 10, 100 and 1000***Let's Learn*

$0.68 \div 10 = 0.068$

$80.08 \div 10 = 8.008$

$0.7 \div 100 = 0.007$

$2.06 \div 100 = 0.0206$

$34.1 \div 1000 = 0.0341$

$146.1 \div 1000 = 0.1461$

*Your Turn*

$0.6 \div 10 = 0.06$

$50.5 \div 10 = 5.05$

$9.7 \div 100 = 0.097$

$65 \div 100 = 0.65$

$43 \div 1000 = 0.043$

$22.1 \div 1000 = 0.0221$

**25 Multiply decimals by 10, 100 and 1000***Let's Learn*

$40.01 \times 10 = 400.1$

$6.1 \times 10 = 61$

$36.21 \times 100 = 3621$

$0.6 \times 100 = 60$

$5.8 \times 1000 = 5800$

$7.05 \times 1000 = 7050$

*Your Turn*

$22.02 \times 10 = 220.2$

$0.61 \times 10 = 6.1$

$28.28 \times 100 = 2828$

$0.4 \times 100 = 40$

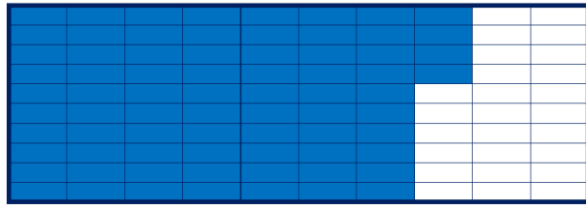
$3.5 \times 1000 = 3500$

$6.052 \times 1000 = 6052$

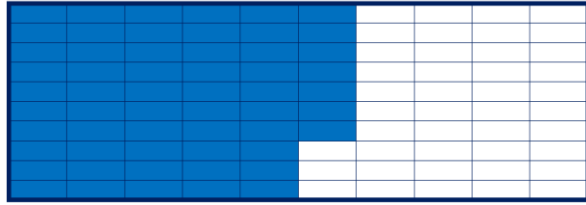


1 Connect fractions, decimals and percentages*Let's Learn*

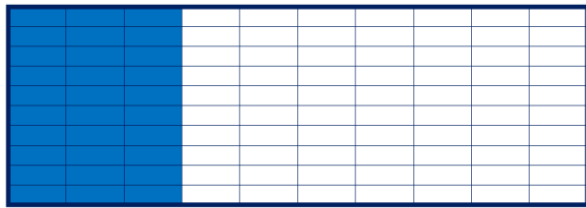
Write each representation as a fraction, a decimal and a percentage.



$$\frac{74}{100}, 0.74, 74\%$$



$$\frac{57}{100}, 0.57, 57\%$$



$$\frac{30}{100} \text{ or } \frac{3}{10}, 0.3, 30\%$$

2 Convert unit fractions to percentages*Let's Learn*

Write each fraction as a percentage.

$$\frac{1}{2} = 50\%$$

$$\frac{1}{4} = 25\%$$

$$\frac{1}{5} = 20\%$$

3 Convert fractions to percentages*Let's Learn*

Write each fraction as a percentage.

$$\frac{9}{10} = 90\%$$

$$\frac{3}{5} = 60\%$$

$$\frac{17}{20} = 85\%$$

Your Turn

Write each fraction as a percentage.

$$\frac{7}{10} = 70\%$$

$$\frac{3}{4} = 75\%$$

$$\frac{17}{25} = 68\%$$

4 Write percentages as simplified fractions*Let's Learn*

Write each percentage as a simplified fraction.

$$30\% = \frac{3}{10}$$

$$2\% = \frac{1}{50}$$

$$40\% = \frac{2}{5}$$

Your Turn

Write each percentage as a simplified fraction.

$$10\% = \frac{1}{10}$$

$$4\% = \frac{1}{25}$$

$$75\% = \frac{3}{4}$$

5 Convert decimals to percentages*Let's Learn*

Write each decimal as a percentage.

$$0.03 = 3\%$$

$$0.4 = 40\%$$

$$0.23 = 23\%$$

Your Turn

Write each decimal as a percentage.

$$0.05 = 5\%$$

$$0.3 = 30\%$$

$$0.65 = 65\%$$