

I created these worksheets because I think it is useful to have regular practice of calculation methods away from the point of teaching. There are 15 worksheets. Questions are aligned to the Year 5 and Year 6 curriculum, with harder questions appearing towards the end. The answers are on the final page.

<u>Worksheets in which objective is covered</u>	<u>Year 5 National Curriculum Objective</u>
all	add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
6-1to 6-5	multiply numbers up to 4 digits by a one-digit number using a formal written method
all	multiply numbers up to 4 digits by a two-digit number using a formal written method, including long multiplication for two-digit numbers
all	divide numbers up to 4 digits by a one-digit number using the formal written method of short division
all	multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
all	round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000
6-1to 6-5	add and subtract fractions with the same denominator
6-1to 6-5	add and subtract fractions with the same denominator and multiples of the same number
6-1to 6-5	recognise mixed numbers and improper fractions and convert from one form to the other
6-1to 6-5	practise adding and subtracting decimals, including a mix of whole numbers and decimals, decimals with different numbers of decimal places, and complements of 1 (for example, $0.83 + 0.17 = 1$)
all	round decimals with two decimal places to the nearest whole number and to one decimal place
all	recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number (e.g. $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$)
all	read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

<u>Worksheets in which objective is covered</u>	<u>Year 6 National Curriculum Objective</u>
6-6+	read, write, order and compare numbers up to 10,000,000 and determine the value of each digit
6-6+	round any whole number to a required degree of accuracy
all	multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
6-6+	divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division
6-10+	identify common factors, common multiples and prime numbers
6-6+	use their knowledge of the order of operations to carry out calculations involving the four operations
6-6+	compare and order fractions, including fractions > 1
6-6+	add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
6-10+	multiply simple pairs of proper fractions, writing the answer in its simplest form
6-10+	divide proper fractions by whole number
all	identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal place
6-6+	multiply one-digit numbers with up to two decimal places by whole numbers
6-6+	solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
6-6+	calculate and interpret the mean as an average

1 $31,459 - 26,296$

2 $1,542 \div 6$

3 $1,293 \times 63$

4 $6,583 \times 6$

5 Round 5,452 to the nearest hundred.

6 Write the value of the Roman numerals

CXXIV

7 $4,060 \div 1,000$

8 $\frac{7}{10} + \frac{1}{5}$

9 $\frac{9}{10} + \frac{8}{10}$ (express answer as a mixed number)

10 $2.97 + \boxed{} = 10$

11 $20.08 \times 1,000$

12 Round 153.74 to one decimal place.

13 Convert $\frac{17}{5}$ into a mixed number.

14 $\frac{3}{5} + \boxed{} = 1\frac{1}{5}$

1 $75,459 + 7,009$

2 $3,296 \div 8$

3 $5,070 \times 28$

4 $2,345 \times 6$

5 Round 1,996 to the nearest ten.

6 Write the value of the Roman numerals
MMIV

7 3.085×100

8 $\frac{3}{10} + \frac{3}{5}$

9 $\frac{5}{8} + \frac{6}{8}$ (express answer as a mixed number)

10 $0.67 + \boxed{} = 1$

11 $20.08 \times 1,000$

12 Round 50.54 to the nearest whole number.

13 Convert $\frac{33}{8}$ into a mixed number.

14 $\frac{6}{7} + \boxed{} = 1\frac{1}{7}$

1 $1,752 + \boxed{} = 3,207$

2 $2,933 \div 7$

3 $2,163 \times 52$

4 $5,785 \times 6$

5 Round 273,497 to the nearest thousand.

6 Write the value of the Roman numerals
MMXVI

7 0.015×100

8 $\frac{4}{20} + \frac{1}{4}$

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

10 $4.08 + \boxed{} = 10$

11 $1.08 \times 1,000$

12 Round 12.47 to the nearest whole number.

13 Convert $\frac{10}{3}$ into a mixed number.

14 $\frac{7}{12} + \boxed{} = 1\frac{3}{12}$

1 $4,163 + \boxed{} = 10,000$

2 $1,825 \div 5$

3 $1,093 \times 92$

4 $1,800 \times 7$

5 Round 350,697 to the nearest thousand.

6 Write the value of the Roman numerals
CXXXIV

7 $2.005 \times 1,000$

8 $\frac{9}{20} + \frac{1}{5}$

9 $3 - \frac{3}{5}$

10 $0.55 + \boxed{} = 2$

11 $308 \div 1,000$

12 Round 4.07 to the nearest one decimal place.

13 Convert $\frac{12}{5}$ into a mixed number.

14 $1\frac{9}{12} + \boxed{} = 2\frac{5}{12}$

1 $6,174 + \boxed{} = 9,250$

2 $5,096 \div 8$

3 793×45

4 $4,109 \times 9$

5 Round 745,697 to the nearest ten thousand.

6 Write the value of the Roman numerals
LXXVI

7 $0.407 \times \boxed{} = 40.7$

8 $\frac{9}{50} + \frac{4}{5}$

9 $5 - \frac{7}{12}$

10 $1.02 + \boxed{} = 10$

11 $620 \div 1,000$

12 Round 2.807 to the nearest one decimal place.

13 Convert $\frac{13}{4}$ into a mixed number.

14 $1\frac{7}{10} + \boxed{} = 2\frac{4}{10}$

1 $6,085 \times 32$

2 $4,550 \div 14$

3 4.12×7

4 30% of £3.20

5 Round 154,897 to the nearest ten thousand.

6 Write the value of the Roman numerals
CIV

7 Circle the biggest fraction

$\frac{2}{5}$ $\frac{6}{10}$ $\frac{11}{20}$

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

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

10 Write the mean average

12	5	10
----	---	----

11 $5,008 \div 1,000$

12 Round 4.467 to the nearest one decimal place

13 $1.205 \times \boxed{} = 120.5$

14 Write in figures the number ten less than half a million

1 $2,508 \times 45$

2 $8,160 \div 32$

3 9.06×5

4 15% of £2.60

5 Round 307,407 to the nearest thousand.

6 Write the value of the Roman numerals
LVI

7 Circle the biggest fraction

$\frac{4}{8}$ $\frac{7}{14}$ $\frac{26}{50}$

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

9 $2\frac{5}{8} + \frac{9}{16}$

10 Write the mean average

11 $4,082 \div 100$

12 Round 1.667 to the nearest one decimal place

13 $4 \times (2 + 3)$

14 Write in figures the number ten less than one hundred thousand

1 $1,006 \times 72$

2 $17,343 \div 41$

3 $\pounds 2.46 \times 6$

4 15% of $\pounds 7.20$

5 Round 455,554 to the nearest thousand.

6 Write the value of the Roman numerals
CIX

7 Circle the biggest fraction

$\frac{3}{5}$ $\frac{11}{20}$ $\frac{23}{40}$

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

9 $2\frac{2}{3} - \frac{5}{6}$

10 Write the mean average

1	9	2	8
---	---	---	---

11 $14,007 \div 100$

12 Round 3.567 to the nearest whole number

13 $4 + 2 \times 3$

14 Write in figures the number fifty less than fifty thousand

1 $35 \times 7,022$

2 $7,904 \div 52$

3 $\pounds 5.06 \times 8$

4 95% of $\pounds 5.00$

5 Round 460,054 to the nearest thousand.

6 Write the value of the Roman numerals
XXIX

7 Circle the biggest fraction

$$\frac{7}{8}$$

$$\frac{7}{9}$$

$$\frac{7}{10}$$

8 $\frac{7}{12} - \frac{1}{3}$

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

10 Write the mean average

12

15

13

12

11 $304,080 \div 1,000$

12 Round 9.817 to the nearest whole number

13 $7 + 5 \times 2$

14 Write in figures the number one less than a quarter of a million

1 $18 \times 4,012$

2 $14,160 \div 6$

3 Circle the prime numbers

9 11 13 15

4 Write all four factors of 10

5 Round 6.517 to the nearest whole number

6 Write the value of the Roman numerals

MMXVII

7 Circle the biggest fraction

$\frac{9}{8}$ $\frac{10}{9}$ $\frac{11}{10}$

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

9 $\frac{1}{4} \div 2$

10 Write the mean average

11 30% of 250ml

12 $\frac{1}{2} \times \frac{1}{4}$

13 $(4 + 6) \times 3$

14 Write in figures the number twenty less than four million

1 $14,207 - 8,653$

2 $7,668 \div 36$

3 Circle the prime numbers

23 25 27 29

4 Write two numbers which are multiples of both 3 and 4

5 Round 0.817 to the nearest whole number

6 Write the value of the Roman numerals

MMXIV

7 Circle the biggest fraction

$\frac{7}{3}$ $2\frac{1}{4}$ $\frac{5}{2}$

8 $\frac{1}{6} + \frac{1}{4}$

9 $\frac{1}{3} \div 3$

10 Write the mean average

1.1 1.5 1.3 0.5

11 15% of 1.2kg

12 $\frac{1}{3} \times \frac{1}{5}$

13 $1 + 3 \times 3$

14 Write in figures the number fifty less than fifty-five thousand

1 $£4.17 \times 8$

2 $5,629 \div 13$

3 Write a number in each box

	multiple of 5	not a multiple of 5
multiple of 6		
not a multiple of 6		

4 $\times 100 = 20.1$

5 Write the value of the Roman numerals
CLXXV

6 Circle the biggest fraction

$\frac{7}{10}$ $\frac{3}{4}$ $\frac{3}{5}$

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

8 $\frac{3}{4} \div 2$

9 Write in the simplest form
 $\frac{25}{55}$

10 35% of 20

11 $\frac{2}{3} \times \frac{1}{4}$

12 $10 - 2 \times 5$

13 Write in figures the number ten less than three million

1 $£6.09 \times 7$

2 $5,629 \div 13$

3 Write a number in each box

	multiple of 30	not a multiple of 30
multiple of 20		
not a multiple of 20		

4 $\div 100 = 0.402$

5 Circle the prime numbers
9 11 13 15

6 Write as a percentage

$$\frac{4}{5}$$

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

8 $\frac{5}{6} \div 5$

9 Write in the simplest form
 $\frac{9}{15}$

10 75% of 40,000

11 Write the answer in the simplest form

$$\frac{2}{3} \times \frac{3}{4}$$

12 $7 \times 2 + 5$

13 Write in figures the number ten less than ten million

1 $23 \times \boxed{} = 3,542$

2 $£3.59 \times 3$

3 Write a number in each box

	factor of 20	not a factor of 20
factor of 15		
not a factor of 15		

4 $\boxed{} \div 100 = 1.001$

5 Circle the prime numbers
19 21 23 25

6 Write as a percentage

$$\frac{3}{5}$$

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

8 $\frac{3}{4} \div 5$

9 Write in the simplest form
 $\frac{9}{24}$

10 35% of £10

11 Write the answer in the simplest form
 $\frac{2}{3}$ of $\frac{3}{10}$

12 Write in words 4,020,050

1 $14 \times \boxed{} = 4,550$

2 $£12 - £3.87$

3 Write a number in each box

	factor of 36	not a factor of 36
factor of 30		
not a factor of 30		

4 $\boxed{} \div 1,000 = 4.08$

5 Circle the prime numbers
27 29 31 33

6 Write as a percentage

$$\frac{11}{20}$$

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

8 $\frac{3}{7} \div 2$

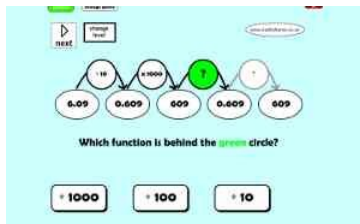
9 Write in the simplest form
 $\frac{48}{64}$

10 65% of £5

11 Write the answer in the simplest form
 $\frac{2}{3}$ of $\frac{9}{10}$

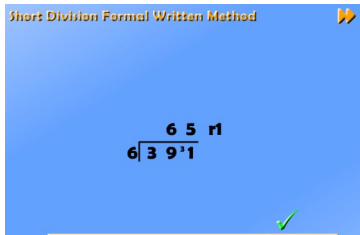
12 Write in words 2,402,008

Useful interactive games to teach the skills needed for Year 6 arithmetic :



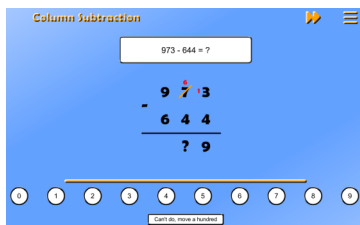
http://mathsframe.co.uk/en/resources/resource/31/multiply_and_divide_by_10_100_and_1000_2

Explore the effect of multiplying and dividing by 10, 100 and 1000.



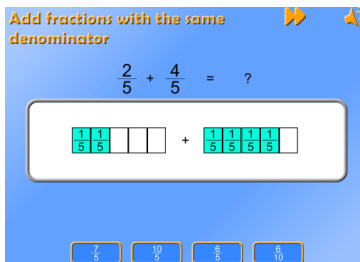
http://mathsframe.co.uk/en/resources/resource/255/Short_Division_Formal_Method

Practise short division



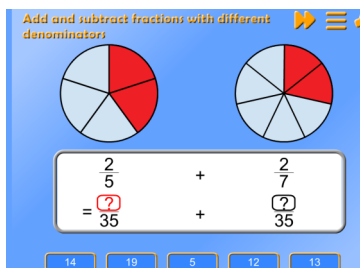
http://mathsframe.co.uk/en/resources/resource/48/column_subtraction

Practise column subtraction



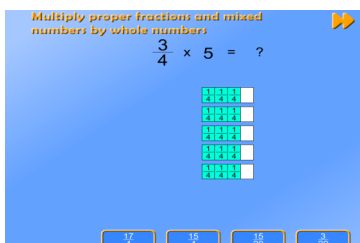
http://mathsframe.co.uk/en/resources/resource/240/Add_Fractions_Same_Denominator

Provides a visual representation to help children understand how to add fractions with the same denominator



http://mathsframe.co.uk/en/resources/resource/239/Add_and_Subtract_Fractions

Add and subtract fractions with different denominators. Helps children to see the need to change the fractions to the same denominator and then add or subtract.



http://mathsframe.co.uk/en/resources/resource/259/Multiply_Fractions

Provides a visual representation to help children how to multiply fractions by a whole number

Sheet 6-1:

1) 5,163	2) 257	3) 81,459	4) 39,498	5) 5,500	6) 124
7) 4.06	8) 9/10	9) 1 7/10	10) 7.03	11) 20,080	12) 153.7
13) 3 2/5	14) 2/5				

Sheet 6-2:

1) 82,468	2) 412	3) 141,960	4) 14,070	5) 2,000	6) 2009
7) 308.5	8) 9/10	9) 1 3/8	10) 0.33	11) 20,080	12) 51
13) 4 1/8	14) 2/7				

Sheet 6-3:

1) 1,455	2) 419	3) 112,476	4) 34,710	5) 273,000	6) 2016
7) 1.5	8) 9/20	9) 3/8	10) 5.92	11) 1080	12) 12
13) 3 1/3	14) 8/12				

Sheet 6-4:

1) 5,837	2) 365	3) 100,556	4) 12,600	5) 351,000	6) 134
7) 2005	8) 13/20	9) 2 2/5	10) 1.45	11) 0.308	12) 4.1
13) 2 2/5	14) 8/12 or 2/3				

Sheet 6-5:

1) 3,076	2) 637	3) 35,685	4) 36,981	5) 750,000	6) 76
7) 100	8) 49/50	9) 4 5/12	10) 8.98	11) 0.62	12) 2.8
13) 3 1/4	14) 7/10				

Sheet 6-6:

1) 194,700	2) 325	3) 28.84	4) 96p	5) 150,000	6) 109
7) 6/10	8) 7/12	9) 6 1/4	10) 9	11) 5.008	12) 4.5
13) 100	14) 499,990				

Sheet 6-7:

1) 112,860	2) 255	3) 45.3	4) 39p	5) 307,000	6) 56
7) 26/50	8) 7/10	9) 3 3/16	10) 30	11) 40.82	12) 1.7
13) 20	14) 99,990				

Sheet 6-8:

1) 72,432	2) 423	3) £14.76	4) 98p	5) 456,000	6) 109
7) 3/5	8) 1/12	9) 1 5/6	10) 5	11) 140.07	12) 4
13) 10	14) 49,950				

Sheet 6-9:

- | | | | | | |
|------------|----------------|-----------|----------|------------|--------|
| 1) 245,770 | 2) 152 | 3) £40.48 | 4) £4.75 | 5) 460,000 | 6) 29 |
| 7) 7/8 | 8) 3/12 or 1/4 | 9) 1 9/10 | 10) 13 | 11) 304.08 | 12) 10 |
| 13) 17 | 14) 249,999 | | | | |

Sheet 6-10:

- | | | | | | |
|-----------|----------|--------------|---------------|----------|---------|
| 1) 72,216 | 2) 2,360 | 3) 11 and 13 | 4) 1, 2, 5,10 | 5) 7 | 6) 2017 |
| 7) 9/8 | 8) 8/15 | 9) 1/8 | 10) 35 | 11) 75ml | 12) 1/8 |
| 13) 4 1/8 | 14) 2/7 | | | | |

Sheet 6-11:

- | | | | | | |
|----------|------------|-----------|---------------------|----------|----------|
| 1) 5,554 | 2) 213 | 3) 23, 29 | 4) 12, 24, 36...etc | 5) 1 | 6) 2014 |
| 7) 5/2 | 8) 5/12 | 9) 1/9 | 10) 1.1 | 11) 180g | 12) 1/15 |
| 13) 10 | 14) 54,950 | | | | |

Sheet 6-12:

- | | | | | | |
|-----------|---------------|----------------------|----------|----------------|--------|
| 1) £33.36 | 2) 433 | 3) check if they fit | 4) 0.201 | 5) 175 | 6) 3/4 |
| 7) 1/6 | 8) 3/8 | 9) 5/11 | 10) 7 | 11) 2/12 = 1/6 | |
| 12) 0 | 13) 2,999,990 | | | | |

Sheet 6-13:

- | | | | | | |
|-----------|---------------|----------------------|------------|-----------|--------|
| 1) £42.63 | 2) 433 | 3) check if they fit | 4) 40.2 | 5) 11, 13 | 6) 80% |
| 7) 3/10 | 8) 1/6 | 9) 3/5 | 10) 30,000 | 11) 1/2 | |
| 12) 19 | 13) 9,999,990 | | | | |

Sheet 6-14:

- | | | | | | |
|---|-----------|----------------------|-----------|-----------|--------|
| 1) 154 | 2) £10.77 | 3) check if they fit | 4) 100.1 | 5) 19, 23 | 6) 60% |
| 7) 3/4 | 8) 3/20 | 9) 3/8 | 10) £3.50 | 11) 1/5 | |
| 12) four million, twenty thousand and fifty | | | | | |

Sheet 6-15:

- | | | | | | |
|--|----------|----------------------|-----------|-----------|--------|
| 1) 325 | 2) £8.13 | 3) check if they fit | 4) 4080 | 5) 29, 31 | 6) 55% |
| 7) 7/10 | 8) 3/14 | 9) 3/4 | 10) £3.25 | 11) 4/5 | |
| 12) two million, four hundred and two thousand and eight | | | | | |