



BRITISH LEARNING CENTRE

YEAR 6

Arithmetic

Workbook

This book helps you practise every kind of question on the Year 6 arithmetic test, with two practice papers.

Name:

English | Learn it · Practise · Challenge · Check

How to use this workbook

1

Learn it

Read the explanation, key words and worked example.

2

Practise

Answer the questions on Sheet A.

3

Challenge

Try the harder questions on Sheet B.

4

Check

Check with the answers at the back and tick the tracker.

My progress tracker

#	Unit · I can...	Tried	Nearly	Got it!
1	Adding and subtracting large numbers I can add and subtract large numbers using the column method.			
2	Square and cube numbers I can use square numbers and cube numbers in calculations.			
3	Order of operations I can use the order of operations to work out calculations.			
4	Long multiplication I can multiply numbers with up to four digits by a 2-digit number.			
5	Long division I can divide numbers with up to four digits by a 2-digit number.			
6	Adding and subtracting fractions I can add and subtract fractions with different denominators.			
7	Mixed numbers I can add and subtract mixed numbers.			
8	Multiplying fractions I can multiply two fractions together.			
9	Dividing fractions I can divide a fraction by a whole number.			
10	Adding and subtracting decimals I can add and subtract decimals with different numbers of decimal places.			
11	Multiplying and dividing decimals I can multiply and divide decimals by whole numbers.			
12	Percentages of amounts I can find percentages of amounts.			
13	Arithmetic paper 1 I can answer a mixed arithmetic paper carefully.			
14	Arithmetic paper 2 I can answer a mixed arithmetic paper carefully.			



CHECK

Start test

Start test

Name _____ Date _____ Score _____ / 20

Work out the answers. Show your working.

1 $(25 + 10) \times 4 =$

2 $\square^3 = 64$

3 $4/7 + 4/5 =$

4 $3/4 - 2/3 =$

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

6 $1/5 \times 7/9 =$

7 $1/8 \div 3 =$

8 $19.5 - 3.16 =$

9 $34 \div 8 =$

10 60% of 380 =

11 50% of 420 =

12 $54.2 \times 1000 =$

13 $284,000 + 93,000 =$

14 $9^2 - 9 \times 3 =$

15

		8	9	2
+		5	2	8

16

	5	6	1	7
-		6	3	5

17

		3	0	2
x				6

18

9	3	9	6	0

19

5	4	6	2

20

	6	.	5
x			8

1

UNIT 1 · LEARN IT

Adding and subtracting large numbers

I can... add and subtract large numbers using the column method.

Line up the digits by place value. Start with the ones column.

Exchange when you need to. Check subtraction by adding.

Top tip: Estimate first: round each number, then add or subtract.

Key words

column

exchange

place value

estimate

Worked example

	2	8	4	7	0	6
-		9	7	3	5	8
	1	8	7	3	4	8

Use the column method.

1

		5	5	5	2	9	4
+			9	6	4	9	3

2

			9	7	4	9	7
+			3	3	5	5	5

3

		7	8	6	4	4	4
+			4	9	5	4	6

4

		8	3	5	9	8
+		3	8	1	5	5

5

		2	5	0	7	2	9
+			9	4	9	5	5

6

		6	6	3	1	9
+		6	5	8	5	2

7

		1	7	7	8	2	7
+		3	3	3	3	7	

8

		2	4	3	5	2
+		5	7	6	6	0

9

		4	7	6	7	2	0
+		1	9	6	8	9	

10

		4	9	7	1	8
+		3	9	6	1	6

11

		4	4	0	5	8	7
+			5	4	9	8	8

12

		6	8	0	1	4
+		9	2	1	3	7

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Use the column method.

1

		8	1	0	0	8	1
-			3	2	0	9	7

2

		7	2	3	6	3	0
-			1	7	5	9	4

3

		3	0	1	3	5	0
-			8	7	5	1	0

4

		8	3	9	1	5	1
-			5	1	8	7	5

5

		8	0	2	0	4	7
-			7	9	0	8	2

6

		7	3	2	9	1	4
-			3	3	9	8	1

7

		7	0	0	4	2	6
-			5	6	8	0	1

8

		7	9	3	4	8	8
-			5	4	4	8	9

9

		1	1	0	0	2	9
-			8	5	1	1	6

10

		3	0	3	5	0	3
-			7	7	9	2	8

11

		4	4	0	0	3	3
-			4	9	2	5	9

12

		9	0	0	6	1	8
-			1	6	1	6	2

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Square and cube numbers

I can... use square numbers and cube numbers in calculations.

7^2 means $7 \times 7 = 49$. 3^3 means $3 \times 3 \times 3 = 27$.

Work out the squares and cubes first, then add, subtract or multiply.

Top tip: Learn the squares to 12^2 and the cubes to 5^3 .

Worked example

$$3^3 + 4^2 = \boxed{43}$$

Key words

square number

cube number

squared

cubed

Work out the answers.

1 $5^2 =$

2 $8^3 =$

3 $3^2 + 2 =$

4 $10^3 =$

5 $5^3 =$

6 $9^2 + 8 =$

7 $6^2 =$

8 $7^2 =$

9 $3^2 + 5 =$

10 $1^3 =$

11 $2^3 =$

12 $9 \times 2^2 =$

13 $8^2 =$

14 $9^2 =$

15 $10^2 + 8 =$

16 $1^2 =$

17 $12^2 =$

18 $9 \times 5^2 =$

19 $4^3 =$

20 $7^3 =$

21 $8^2 + 7 =$

22 $9^3 =$

23 $13^2 =$

24 $9^2 + 7 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers.

1 $2^3 + 7^2 = \square$

2 $\square^2 = 81$

3 $2^3 + 4^2 = \square$

4 $\square^3 = 216$

5 $5^3 \times 9 = \square$

6 $5^3 + 9^2 = \square$

7 $\square^3 = 64$

8 $8^2 + 3^2 = \square$

9 $4^3 \times 2 = \square$

10 $8^2 + 6^2 = \square$

11 $3^3 \times 4 = \square$

12 $\square^2 = 4$

13 $4^3 \times 4 = \square$

14 $4^3 \times 8 = \square$

15 $4^3 \times 5 = \square$

16 $4^3 + 7^2 = \square$

17 $\square^3 = 8$

18 $\square^3 = 27$

19 $5^3 + 6^2 = \square$

20 $9^2 + 2^2 = \square$

21 $\square^2 = 100$

22 $5^3 + 4^2 = \square$

23 $3^3 + 6^2 = \square$

24 $\square^2 = 121$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Order of operations

I can... use the order of operations to work out calculations.

Work out calculations in this order: Brackets, Indices (² and ³), Division and Multiplication, then Addition and Subtraction.

So $3 + 4 \times 5 = 3 + 20 = 23$.

Top tip: Brackets first, always.

Worked example

$$3 + 4 \times 5 = \boxed{23}$$

Key words

brackets

order

operation

BIDMAS

Work out the answers.

1 $8 \times 2 - 6 =$

2 $28 + 12 \times 6 =$

3 $18 + 10 \div 5 =$

4 $24 - 54 \div 6 =$

5 $12 + 3 \times 6 =$

6 $27 - 77 \div 11 =$

7 $(27 - 9) \times 4 =$

8 $14 - 60 \div 12 =$

9 $(15 + 2) \times 5 =$

10 $(27 - 9) \times 10 =$

11 $5 \times 10 - 12 =$

12 $(12 + 8) \times 5 =$

13 $18 - 80 \div 8 =$

14 $24 + 42 \div 6 =$

15 $(20 - 9) \times 7 =$

16 $10 - 2 \times 2 =$

17 $(16 + 10) \times 2 =$

18 $30 - 77 \div 11 =$

19 $25 - 55 \div 11 =$

20 $(28 - 9) \times 5 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers.

1 $3^2 + 7 \times 9 =$

2 $11^2 - 3 \times 2 =$

3 $3 + 4 \times 6 - 8 =$

4 $9^2 + 7 \times 10 =$

5 $9^2 + 5 \times 12 =$

6 $9^2 - 7 \times 9 =$

7 $18 + 11 \times 7 - 3 =$

8 $13 + 4 \times 4 - 11 =$

9 $9 \times (8 - 4) + 20 =$

10 $7 \times (9 - 3) + 6 =$

11 $3^2 + 7 \times 2 =$

12 $12^2 - 7 \times 8 =$

13 $(69 + 3) \div 6 =$

14 $11^2 + 5 \times 2 =$

15 $12 \times 11 - 12 \times 11 =$

16 $21 \times 12 - 12 \times 2 =$

17 $(7 + 7) \div 2 =$

18 $12 \times (7 - 2) + 14 =$

19 $(15 + 3) \div 2 =$

20 $136 \div (7 + 10) =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Use long multiplication.

Use long multiplication.

Long division

I can... divide numbers with up to four digits by a 2-digit number.

Write some multiples of the divisor first. Use them to divide one step at a time.

Subtract, bring down the next digit and divide again. Anything left at the end is the remainder.

Top tip: List multiples: 1×24 , 2×24 , 3×24 ...

Key words

long division

divisor

multiple

remainder

Worked example

		3	0	2
24	7	2	4	8

Use long division.

1

19	9	6	9

2

27	3	5	3	7

3

37	9	9	9

4

46	2	2	0	8

5

27	7	0	2

6

18	9	8	2	8

7

25	5	7	5

8

27	2	9	9	7

9

29	4	6	4

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Use long division.

1

39	8	0	4	5

2

14	7	5	8	9

3

12	3	2	5	4

4

35	6	7	3	0

5

17	7	4	2	3

6

16	1	3	8	3

7

24	2	0	8	3

8

14	2	2	6	0

9

12	1	1	2	6

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Adding and subtracting fractions

I can... add and subtract fractions with different denominators.

Find a common denominator: a number both denominators go into.

$\frac{2}{3} + \frac{1}{4}$: change to twelfths. $\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$.

Top tip: Simplify your answer if you can.

Worked example

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

Key words

common denominator

equivalent

simplest form

multiple

Give your answer as a fraction in its simplest form.

1 $1/2 + 3/5 =$

2 $2/5 - 1/8 =$

3 $1/10 + 7/12 =$

4 $3/5 - 3/8 =$

5 $1/3 + 3/4 =$

6 $4/5 - 2/7 =$

7 $1/7 + 3/5 =$

8 $1/4 - 1/7 =$

9 $1/5 + 3/4 =$

10 $1/3 - 1/8 =$

11 $2/5 + 6/11 =$

12 $4/5 - 1/8 =$

13 $2/5 + 1/7 =$

14 $1/2 - 1/7 =$

15 $1/2 + 4/5 =$

16 $2/3 - 1/7 =$

17 $3/8 + 3/5 =$

18 $7/11 - 1/5 =$

19 $4/7 + 2/3 =$

20 $7/9 - 1/2 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Give your answer as a fraction in its simplest form.

1 $7/8 + 1/2 =$

2 $1/3 + 5/7 =$

3 $3/4 - 1/5 =$

4 $5/6 + 1/2 =$

5 $2/3 + 1/8 =$

6 $7/10 - 1/6 =$

7 $5/8 + 1/2 =$

8 $6/11 + 3/4 =$

9 $3/4 - 1/3 =$

10 $1/3 + 7/9 =$

11 $1/2 + 1/3 =$

12 $3/4 - 7/10 =$

13 $2/3 + 5/9 =$

14 $1/4 + 8/11 =$

15 $3/5 - 1/2 =$

16 $9/16 + 3/4 =$

17 $1/6 + 1/4 =$

18 $1/2 - 3/11 =$

19 $2/3 + 5/6 =$

20 $3/7 + 1/3 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Mixed numbers

I can... add and subtract mixed numbers.

Add or subtract the whole numbers first. Then add or subtract the fractions.

If the fraction part is too small to subtract, change one whole into a fraction.

Top tip: You can also change mixed numbers into improper fractions first.

Key words

mixed number

whole number

improper fraction

common denominator

Worked example

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

Give your answer as a fraction in its simplest form.

1 $3\frac{3}{5} + 3\frac{1}{7} =$

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

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

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

5 $3\frac{2}{3} + 3\frac{6}{7} =$

6 $4\frac{3}{8} + 1\frac{1}{3} =$

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

8 $5\frac{5}{8} + 2\frac{5}{6} =$

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

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

11 $5\frac{3}{5} + 4\frac{2}{3} =$

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

13 $5\frac{4}{5} + 1\frac{2}{3} =$

14 $1\frac{2}{5} + 3\frac{1}{2} =$

15 $5\frac{3}{4} + 2\frac{3}{7} =$

16 $1\frac{4}{5} + 3\frac{3}{8} =$

17 $5\frac{4}{5} + 1\frac{1}{2} =$

18 $3\frac{1}{3} + 1\frac{3}{5} =$

19 $4\frac{3}{4} + 2\frac{1}{7} =$

20 $2\frac{2}{3} + 1\frac{4}{7} =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Give your answer as a fraction in its simplest form.

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

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

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

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

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

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

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

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

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

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

11 $4\frac{2}{3} - 2\frac{4}{7} =$

12 $3\frac{1}{5} - 1\frac{1}{7} =$

13 $5\frac{5}{8} - 2\frac{3}{5} =$

14 $3\frac{5}{8} - 1\frac{5}{6} =$

15 $5\frac{3}{4} - 4\frac{1}{5} =$

16 $5\frac{1}{6} - 3\frac{7}{8} =$

17 $4\frac{4}{5} - 3\frac{2}{3} =$

18 $5\frac{4}{5} - 1\frac{3}{4} =$

19 $3\frac{1}{5} - 1\frac{1}{6} =$

20 $4\frac{4}{7} - 1\frac{3}{5} =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Multiplying fractions

I can... multiply two fractions together.

Multiply the numerators. Then multiply the denominators.

$\frac{1}{4} \times \frac{2}{3} = \frac{2}{12}$. Simplify: $\frac{2}{12} = \frac{1}{6}$.

Top tip: Simplify at the end, or cancel before you multiply.

Worked example

$$\frac{1}{4} \times \frac{2}{3} = \boxed{\frac{1}{6}}$$

Key words

numerator

denominator

multiply

simplest form

Give your answer as a fraction in its simplest form.

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

2 $\frac{1}{9} \times \frac{2}{3} =$

3 $\frac{1}{9} \times \frac{4}{7} =$

4 $\frac{1}{6} \times \frac{2}{5} =$

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

6 $\frac{1}{2} \times \frac{1}{6} =$

7 $\frac{1}{7} \times \frac{2}{3} =$

8 $\frac{1}{7} \times \frac{7}{10} =$

9 $\frac{1}{5} \times \frac{2}{7} =$

10 $\frac{1}{2} \times \frac{4}{5} =$

11 $\frac{1}{6} \times \frac{7}{8} =$

12 $\frac{1}{2} \times \frac{5}{6} =$

13 $\frac{1}{7} \times \frac{5}{8} =$

14 $\frac{1}{7} \times \frac{1}{4} =$

15 $\frac{1}{2} \times \frac{1}{7} =$

16 $\frac{1}{3} \times \frac{5}{8} =$

17 $\frac{1}{3} \times \frac{2}{3} =$

18 $\frac{1}{8} \times \frac{1}{2} =$

19 $\frac{1}{8} \times \frac{4}{9} =$

20 $\frac{1}{6} \times \frac{1}{3} =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Give your answer as a fraction in its simplest form.

1 $1/2 \times 1/4 =$

2 $2/5 \times 1/2 =$

3 $1/3 \times 9/10 =$

4 $4/7 \times 1/5 =$

5 $2/5 \times 1/8 =$

6 $1/5 \times 2/5 =$

7 $1/2 \times 5/6 =$

8 $2/7 \times 1/2 =$

9 $3/8 \times 8/9 =$

10 $1/5 \times 5/7 =$

11 $2/3 \times 3/10 =$

12 $2/9 \times 3/5 =$

13 $1/4 \times 4/7 =$

14 $1/2 \times 4/7 =$

15 $5/8 \times 4/5 =$

16 $1/5 \times 5/8 =$

17 $1/2 \times 2/3 =$

18 $5/6 \times 1/6 =$

19 $4/9 \times 7/10 =$

20 $1/5 \times 4/7 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Dividing fractions

I can... divide a fraction by a whole number.

If the numerator divides exactly, divide it: $3/4 \div 3 = 1/4$.

If not, multiply the denominator by the whole number: $2/5 \div 4 = 2/20 = 1/10$.

Top tip: Dividing by 4 is the same as finding $1/4$ of it.

Worked example

$$2/5 \div 4 = \boxed{1/10}$$

Key words

divide

fraction

whole number

denominator

Give your answer as a fraction in its simplest form.

1 $4/7 \div 5 =$

2 $6/7 \div 3 =$

3 $1/6 \div 5 =$

4 $1/5 \div 2 =$

5 $7/10 \div 4 =$

6 $1/2 \div 4 =$

7 $3/5 \div 3 =$

8 $5/7 \div 3 =$

9 $4/5 \div 4 =$

10 $5/8 \div 5 =$

11 $2/5 \div 2 =$

12 $1/10 \div 3 =$

13 $5/7 \div 4 =$

14 $3/4 \div 3 =$

15 $8/9 \div 3 =$

16 $2/5 \div 5 =$

17 $7/8 \div 2 =$

18 $1/6 \div 4 =$

19 $1/2 \div 2 =$

20 $3/7 \div 3 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Give your answer as a fraction in its simplest form.

1 $1/2 \div 3 =$

2 $4/5 \div 8 =$

3 $1/2 \div 6 =$

4 $2/3 \div 8 =$

5 $1/5 \div 4 =$

6 $1/4 \div 2 =$

7 $1/2 \div 2 =$

8 $7/8 \div 5 =$

9 $5/7 \div 5 =$

10 $5/7 \div 4 =$

11 $1/2 \div 7 =$

12 $4/7 \div 3 =$

13 $3/4 \div 8 =$

14 $2/3 \div 4 =$

15 $3/10 \div 7 =$

16 $1/6 \div 4 =$

17 $1/7 \div 3 =$

18 $1/4 \div 4 =$

19 $5/9 \div 7 =$

20 $7/8 \div 7 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Adding and subtracting decimals

I can... add and subtract decimals with different numbers of decimal places.

Line up the decimal points. Use 0 as a place holder: 12.5 becomes 12.50.

Then use the column method.

Top tip: A whole number like 7 can be written as 7.00.

Key words

decimal point

place holder

tenths

hundredths

Worked example

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

Use the column method.

1

			9	.	8	2
+		5	5	.	3	6

2

	8	5	.	1	4
-		8	.	2	0

3

			5	.	3	7
+		5	6	.	8	0

4

	8	0	.	2	0
-		2	.	1	9

5

	8	3	.	4	2
+		1	.	2	2

6

		7	1	.	4	0
-		6	6	.	0	4

7

		6	4	.	3	0
+		5	8	.	6	0

8

		6	9	.	9	4
-		5	2	.	8	7

9

		2	9	.	9
+		4	0	.	6

10

		8	6	.	8	0
-		4	7	.	6	0

11

		4	5	.	6	7
+		2	3	.	8	8

12

		7	5	.	3	4
-		2	9	.	1	0

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers.

1 $14 - 3.39 =$

2 $1 - 0.17 =$

3 $0.52 + 0.5 =$

4 $1 - 0.7 =$

5 $0.74 + 0.1 =$

6 $15 - 5.54 =$

7 $0.01 + 0.4 =$

8 $1 - 0.51 =$

9 $1 - 0.23 =$

10 $24.8 + 2.7 =$

11 $23.5 + 7.39 =$

12 $0.32 + 0.7 =$

13 $16 - 3.42 =$

14 $1 - 0.25 =$

15 $2.9 - 1.64 =$

16 $30 + 6.32 =$

17 $14.3 - 1.9 =$

18 $1 - 0.85 =$

19 $8.8 - 4.56 =$

20 $1 - 0.96 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Multiplying and dividing decimals

I can... multiply and divide decimals by whole numbers.

Use short multiplication or short division. Keep the decimal point in the same place.

Sometimes a division needs decimals: $7 \div 4 = 1.75$.

Top tip: Put the decimal point in the answer first.

Key words

decimal

multiply

divide

place value

Worked example

		4	.	3	6
×					6
	2	6	.	1	6

Use the column method.

1

	4	.	5
x			8

2

6	7	.	2	6

3

		7	.	8	2
x					4

4

7	7	3	.	5

5

		2	.	2	7
x					8

6

6	8	.	1	6

7

	1	0	.	4
x				8

8

9	3	5	.	2	8

9

	3	.	0	5
x				8

10

3	5	4	.	3

11

		7	.	8	8
x					6

12

6	6	0	.	6

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers.

1 $8.3 \times 3 =$

2 $40.6 \div 7 =$

3 $75.73 \times 10 =$

4 $5.4 \times 6 =$

5 $35.07 \times 1000 =$

6 $60.15 \times 1000 =$

7 $64.64 \times 1000 =$

8 $4.31 \times 1000 =$

9 $5.9 \times 2 =$

10 $493.8 \div 1000 =$

11 $7.2 \times 5 =$

12 $750.4 \div 10 =$

13 $39 \div 5 =$

14 $0.8 \times 7 =$

15 $38.78 \times 1000 =$

16 $4.7 \div 1000 =$

17 $693.3 \div 1000 =$

18 $39 \div 4 =$

19 $89.84 \times 1000 =$

20 $52.2 \div 9 =$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Percentages of amounts

I can... find percentages of amounts.

Find 10% by dividing by 10. Find 5% by halving 10%. Find 1% by dividing by 100.

15% of 360: 10% = 36 and 5% = 18, so 15% = 54.

Top tip: Build any percentage from 10%, 5% and 1%.

Worked example

15% of 360 = **54**

Key words

per cent

percentage

10%

1%

Work out the answers.

1 25% of 360 =

2 75% of 420 =

3 25% of 180 =

4 5% of 320 =

5 5% of 140 =

6 25% of 60 =

7 5% of 220 =

8 75% of 560 =

9 50% of 60 =

10 5% of 440 =

11 75% of 180 =

12 50% of 360 =

13 10% of 260 =

14 1% of 500 =

15 1% of 100 =

16 10% of 240 =

17 1% of 400 =

18 25% of 380 =

19 10% of 140 =

20 10% of 300 =

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers.

1 15% of 380 =

2 12% of 900 =

3 95% of 280 =

4 35% of 80 =

5 85% of 700 =

6 30% of 420 =

7 2% of 420 =

8 15% of 460 =

9 85% of 60 =

10 4% of 200 =

11 60% of 580 =

12 65% of 640 =

13 40% of 360 =

14 15% of 200 =

15 40% of 20 =

16 35% of 180 =

17 35% of 160 =

18 40% of 520 =

19 35% of 300 =

20 60% of 60 =

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Arithmetic paper 1

I can... answer a mixed arithmetic paper carefully.

This paper has many kinds of questions. Read each sign carefully.

Use a mental method when it is quick. Use a written method for harder questions and show your working.

Top tip: If a question is hard, move on and come back to it later.

Key words

mixed

method

working

check

Worked example

$$(5 + 7) \times 3 = \boxed{36}$$

Work out the answers.

1 $12 - 24 \div 4 = \boxed{}$

2 $\boxed{} \times 10 = 40$

3 $2^2 + 7^2 = \boxed{}$

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

5 $1/7 \times 1/7 = \boxed{}$

6 $1/8 \div 2 = \boxed{}$

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

8 $1 - 0.84 = \boxed{}$

9 $174 \div 1000 = \boxed{}$

10 30% of 980 = $\boxed{}$

11 $97,100 - 500 = \boxed{}$

12 $1/2 - 1/8 = \boxed{}$

13 $1/5 \times 6 = \boxed{}$

14 $27 \div 3 = \boxed{}$

15 $10 - 80 \div 8 = \boxed{}$

16 $0.91 \times 100 = \boxed{}$

17 $4^3 + 2^2 = \boxed{}$

18 $1/5 + 2/9 = \boxed{}$

19 $1/10 \times 5/6 = \boxed{}$

20 $2/3 \div 5 = \boxed{}$

21 $4\frac{3}{4} - 3\frac{1}{8} = \boxed{}$

22 $1 - 0.05 = \boxed{}$

23 $46 \div 8 = \boxed{}$

24 4% of 600 = $\boxed{}$

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers. Show your working.

1

		5	8	6	3	2
+			3	6	4	1

2

		4	4	4	0	2
-			8	4	2	4

3

			7	0	5	3
x						8

4

9	3	9	9	6	

5

				6	4	9	5
x						3	7

6

				3	0	4
x					4	9

7

		4	1	9	6	0
+			3	8	6	8

8

		6	1	3	8	4
-			5	4	1	9

9

			4	3	3	4
x						8

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Arithmetic paper 2

I can... answer a mixed arithmetic paper carefully.

This is another mixed paper. Try to beat your score on Paper 1.

Show your working for long multiplication and long division.

Top tip: Check your answers when you finish.

Worked example

$$\frac{3}{4} \times \frac{2}{9} = \boxed{\frac{1}{6}}$$

Key words

mixed

method

working

check

Work out the answers.

1 $27 + 35 \div 5 =$

2 $0.25 \times 100 =$

3 $\square^2 = 144$

4 $2/3 + 4/5 =$

5 $1/10 \times 1/3 =$

6 $4/7 \div 2 =$

7 $3\frac{6}{7} - 1\frac{1}{2} =$

8 $0.87 + 0.6 =$

9 $19.5 \div 3 =$

10 15% of 840 =

11 $18,600 - 5000 =$

12 $7/8 - 1/2 =$

13 $2 \times 1/3 =$

14 $55 \div 11 =$

15 $24 + 4 \times 2 =$

16 $0.09 \times 1000 =$

17 $5^2 + 7^2 =$

18 $2/3 + 2/5 =$

19 $1/7 \times 1/2 =$

20 $1/4 \div 3 =$

21 $5\frac{3}{4} - 3\frac{1}{2} =$

22 $3.5 + 2.05 =$

23 $29.19 \times 1000 =$

24 15% of 740 =

How did I do? ☐ Tried ☐ Nearly ☐ Got it!

Work out the answers. Show your working.

1

		4	3	9	4	4
+			4	4	7	2

2

		8	6	0	8	1
-			4	1	9	9

3

			2	8	4	4
x						8

4

32	9	0	2	4

5

				8	2	2	6
x					8	4	

6

49	9	4	9	0

7

		2	6	3	3	7
+			3	3	9	3

8

	1	3	6	4	3
-		8	2	8	2

9

	1	3	9	7
x				6

How did I do? ☐ Tried ☐ Nearly ☐ Got it!



CHECK

End test

End test

Name _____ Date _____ Score _____ / 20

Work out the answers. Show your working.

1 $(12 + 2) \times 7 =$

2 $5^3 \times 7 =$

3 $4/7 + 1/2 =$

4 $3/5 - 1/8 =$

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

6 $1/6 \times 7/9 =$

7 $1/3 \div 3 =$

8 $8.3 - 2.53 =$

9 $4.3 \times 9 =$

10 65% of 780 =

11 5% of 380 =

12 $7000 \div 100 =$

13 $51,000 + 9000 =$

14 $(22 + 6) \div 7 =$

15

		5	3	6
+		8	8	8

16

	6	0	2	3
-		6	6	6

17

		7	4	7
x				6

18

3	9	3	6	3

19

7	4	9	4	

20

		7	.	8
x				8

**Start test**

1 140 2 4 3 $1\frac{13}{35}$ 4 $1\frac{1}{12}$ 5 $6\frac{25}{28}$ 6 $7\frac{7}{45}$ 7 $1\frac{24}{8}$ 8
16.34 9 4.25 10 228 11 210 12 54,200 13 377,000 14
54 15 1420 16 4982 17 1812 18 440 19 92 r2 20 52

Unit 1 · Sheet A — Adding and subtracting large numbers

1 651,787 2 131,052 3 835,990 4 121,753 5 345,684 6
132,171 7 211,164 8 82,012 9 496,409 10 89,334 11
495,575 12 160,151

Unit 1 · Sheet B — Adding and subtracting large numbers

1 777,984 2 706,036 3 213,840 4 787,276 5 722,965 6
698,933 7 643,625 8 738,999 9 24,913 10 225,575 11
390,774 12 884,456

Unit 2 · Sheet A — Square and cube numbers

1 25 2 512 3 11 4 1000 5 125 6 89 7 36 8 49 9 14
10 1 11 8 12 36 13 64 14 81 15 108 16 1 17 144 18
225 19 64 20 343 21 71 22 729 23 169 24 88

Unit 2 · Sheet B — Square and cube numbers

1 57 2 9 3 24 4 6 5 1125 6 206 7 4 8 73 9 128 10
100 11 108 12 2 13 256 14 512 15 320 16 113 17 2
18 3 19 161 20 85 21 10 22 141 23 63 24 11

Unit 3 · Sheet A — Order of operations

1 10 2 100 3 20 4 15 5 30 6 20 7 72 8 9 9 85 10
180 11 38 12 100 13 8 14 31 15 77 16 6 17 52 18
23 19 20 20 95

Unit 3 · Sheet B — Order of operations

1 72 2 115 3 19 4 151 5 141 6 18 7 92 8 18 9 56 10
48 11 23 12 88 13 12 14 131 15 0 16 228 17 7 18
74 19 9 20 8

Unit 4 · Sheet A — Long multiplication

1 25,854 2 95,680 3 22,659 4 114,322 5 58,050 6
527,589 7 90,720 8 260,703 9 16,666

Unit 4 · Sheet B — Long multiplication

1 364,395 2 552,067 3 321,954 4 180,987 5 94,605 6
133,903 7 102,180 8 321,129 9 86,242

Unit 5 · Sheet A — Long division

1 51 2 131 3 27 4 48 5 26 6 546 7 23 8 111 9 16

Unit 5 · Sheet B — Long division

1 206 r11 2 542 r1 3 271 r2 4 192 r10 5 436 r11 6 86 r
7 786 r19 8 161 r6 9 93 r10

Unit 6 · Sheet A — Adding and subtracting fractions

1 $1\frac{11}{10}$ 2 $1\frac{11}{40}$ 3 $4\frac{1}{60}$ 4 $9\frac{4}{40}$ 5 $1\frac{11}{12}$ 6 $18\frac{35}{7}$ 7
 $26\frac{35}{35}$ 8 $3\frac{3}{28}$ 9 $19\frac{20}{20}$ 10 $5\frac{24}{24}$ 11 $52\frac{55}{55}$ 12 $27\frac{40}{40}$ 13
 $19\frac{35}{35}$ 14 $5\frac{14}{14}$ 15 $1\frac{3}{10}$ 16 $11\frac{21}{21}$ 17 $39\frac{40}{40}$ 18 $24\frac{55}{55}$
19 $15\frac{21}{21}$ 20 $5\frac{18}{18}$

Unit 6 · Sheet B — Adding and subtracting fractions

1 $1\frac{3}{8}$ 2 $1\frac{11}{21}$ 3 $1\frac{11}{20}$ 4 $1\frac{11}{3}$ 5 $19\frac{24}{24}$ 6 $8\frac{15}{15}$ 7 1
 $1\frac{8}{8}$ 8 $1\frac{13}{44}$ 9 $5\frac{12}{12}$ 10 $1\frac{11}{9}$ 11 $5\frac{6}{6}$ 12 $1\frac{20}{20}$ 13 1
 $2\frac{9}{9}$ 14 $43\frac{44}{44}$ 15 $1\frac{10}{10}$ 16 $15\frac{16}{16}$ 17 $5\frac{12}{12}$ 18 $5\frac{22}{22}$ 19 1
 $1\frac{2}{2}$ 20 $16\frac{21}{21}$

Unit 7 · Sheet A — Mixed numbers

1 $6\frac{26}{35}$ 2 $5\frac{4}{15}$ 3 $5\frac{33}{40}$ 4 $6\frac{13}{21}$ 5 $7\frac{11}{21}$ 6 5
 $17\frac{24}{24}$ 7 $8\frac{7}{20}$ 8 $8\frac{11}{24}$ 9 $3\frac{11}{20}$ 10 $7\frac{3}{8}$ 11 10
 $4\frac{15}{15}$ 12 $6\frac{13}{35}$ 13 $7\frac{7}{15}$ 14 $4\frac{9}{10}$ 15 $8\frac{5}{28}$ 16 5
 $7\frac{40}{40}$ 17 $7\frac{3}{10}$ 18 $4\frac{14}{15}$ 19 $6\frac{25}{28}$ 20 $4\frac{5}{21}$

Unit 7 · Sheet B — Mixed numbers

1 $3\frac{9}{35}$ 2 $19\frac{40}{40}$ 3 $4\frac{1}{6}$ 4 $2\frac{5}{12}$ 5 $2\frac{5}{6}$ 6 $1\frac{11}{10}$ 7
 $1\frac{2}{2}$ 8 $15\frac{6}{6}$ 9 $3\frac{9}{10}$ 10 $1\frac{4}{4}$ 11 $2\frac{2}{21}$ 12 $2\frac{2}{35}$ 13 3
 $1\frac{40}{40}$ 14 $1\frac{19}{24}$ 15 $1\frac{11}{20}$ 16 $17\frac{24}{24}$ 17 $12\frac{15}{15}$ 18 4
 $1\frac{20}{20}$ 19 $2\frac{1}{30}$ 20 $2\frac{34}{35}$

Unit 8 · Sheet A — Multiplying fractions

1 $1\frac{1}{6}$ 2 $2\frac{2}{27}$ 3 $4\frac{1}{63}$ 4 $1\frac{1}{15}$ 5 $1\frac{1}{5}$ 6 $1\frac{1}{12}$ 7 $2\frac{2}{21}$ 8
 $1\frac{10}{10}$ 9 $2\frac{3}{35}$ 10 $2\frac{5}{5}$ 11 $7\frac{48}{48}$ 12 $5\frac{12}{12}$ 13 $5\frac{56}{56}$ 14
 $1\frac{28}{28}$ 15 $1\frac{14}{14}$ 16 $5\frac{24}{24}$ 17 $2\frac{9}{9}$ 18 $1\frac{16}{16}$ 19 $1\frac{18}{18}$ 20
 $1\frac{18}{18}$

Unit 8 · Sheet B — Multiplying fractions

1 $1\frac{1}{8}$ 2 $1\frac{1}{5}$ 3 $3\frac{3}{10}$ 4 $4\frac{4}{35}$ 5 $1\frac{1}{20}$ 6 $2\frac{2}{25}$ 7 $5\frac{12}{12}$ 8
 $1\frac{7}{7}$ 9 $1\frac{3}{3}$ 10 $1\frac{7}{7}$ 11 $1\frac{5}{5}$ 12 $2\frac{15}{15}$ 13 $1\frac{7}{7}$ 14 $2\frac{7}{7}$ 15
 $1\frac{2}{2}$ 16 $1\frac{8}{8}$ 17 $1\frac{3}{3}$ 18 $5\frac{36}{36}$ 19 $14\frac{45}{45}$ 20 $4\frac{35}{35}$

Unit 9 · Sheet A — Dividing fractions

1 $4\frac{35}{35}$ 2 $2\frac{7}{7}$ 3 $1\frac{30}{30}$ 4 $1\frac{10}{10}$ 5 $7\frac{40}{40}$ 6 $1\frac{8}{8}$ 7 $1\frac{5}{5}$ 8
 $5\frac{21}{21}$ 9 $1\frac{5}{5}$ 10 $1\frac{8}{8}$ 11 $1\frac{5}{5}$ 12 $1\frac{30}{30}$ 13 $5\frac{28}{28}$ 14 $1\frac{4}{4}$ 15
 $8\frac{27}{27}$ 16 $2\frac{25}{25}$ 17 $7\frac{16}{16}$ 18 $1\frac{24}{24}$ 19 $1\frac{4}{4}$ 20 $1\frac{7}{7}$

Unit 9 · Sheet B — Dividing fractions

1 $1\frac{1}{6}$ 2 $1\frac{10}{10}$ 3 $1\frac{12}{12}$ 4 $1\frac{12}{12}$ 5 $1\frac{20}{20}$ 6 $1\frac{8}{8}$ 7 $1\frac{4}{4}$ 8
 $7\frac{40}{40}$ 9 $1\frac{7}{7}$ 10 $5\frac{28}{28}$ 11 $1\frac{14}{14}$ 12 $4\frac{21}{21}$ 13 $3\frac{32}{32}$ 14 $1\frac{6}{6}$
15 $3\frac{70}{70}$ 16 $1\frac{24}{24}$ 17 $1\frac{21}{21}$ 18 $1\frac{16}{16}$ 19 $5\frac{63}{63}$ 20 $1\frac{8}{8}$

Unit 10 · Sheet A — Adding and subtracting decimals

1 65.18 2 76.94 3 62.17 4 78.01 5 84.64 6 5.36 7 122.9
8 17.07 9 70.5 10 39.2 11 69.55 12 46.24

Unit 10 · Sheet B — Adding and subtracting decimals

1 10.61 2 0.83 3 1.02 4 0.3 5 0.84 6 9.46 7 0.41 8
0.49 9 0.77 10 27.5 11 30.89 12 1.02 13 12.58 14 0.75
15 1.26 16 36.32 17 12.4 18 0.15 19 4.24 20 0.04

Unit 11 · Sheet A — Multiplying and dividing decimals

1 36 2 1.21 3 31.28 4 10.5 5 18.16 6 1.36 7 83.2 8
3.92 9 24.4 10 18.1 11 47.28 12 10.1

Unit 11 · Sheet B — Multiplying and dividing decimals

1 24.9 2 5.8 3 757.3 4 32.4 5 35,070 6 60,150 7
64,640 8 4310 9 11.8 10 0.4938 11 36 12 75.04 13 7.8
14 5.6 15 38,780 16 0.0047 17 0.6933 18 9.75 19
89,840 20 5.8

Unit 12 · Sheet A — Percentages of amounts

1 90 2 315 3 45 4 16 5 7 6 15 7 11 8 420 9 30 10
22 11 135 12 180 13 26 14 5 15 1 16 24 17 4 18 95
19 14 20 30

Unit 12 · Sheet B — Percentages of amounts

1 57 2 108 3 266 4 28 5 595 6 126 7 8.4 8 69 9 51
10 8 11 348 12 416 13 144 14 30 15 8 16 63 17 56
18 208 19 105 20 36

Unit 13 · Sheet A — Arithmetic paper 1

1 6 2 4 3 53 4 5/6 5 1/49 6 1/16 7 4 18/35 8 0.16 9
0.174 10 294 11 96,600 12 3/8 13 11/5 14 9 15 0 16
91 17 68 18 19/45 19 1/12 20 2/15 21 15/8 22 0.95
23 5.75 24 24

Unit 13 · Sheet B — Arithmetic paper 1

1 62,273 2 35,978 3 56,424 4 444 5 240,315 6 14,896 7
45,828 8 55,965 9 34,672

Unit 14 · Sheet A — Arithmetic paper 2

1 34 2 25 3 12 4 17/15 5 1/30 6 2/7 7 2 5/14 8 1.47
9 6.5 10 126 11 13,600 12 3/8 13 2/3 14 5 15 32 16
90 17 74 18 11/15 19 1/14 20 1/12 21 2 1/4 22 5.55
23 29,190 24 111

Unit 14 · Sheet B — Arithmetic paper 2

1 48,416 2 81,882 3 22,752 4 282 5 690,984 6 193 r 33
7 29,730 8 5361 9 8382

End test

1 98 2 875 3 11/14 4 19/40 5 77/15 6 7/54 7 1/9 8
5.77 9 38.7 10 507 11 19 12 70 13 60,000 14 4 15
1424 16 5357 17 4482 18 3121 19 70 r 4 20 62.4