



BRITISH LEARNING CENTRE

YEAR 5

Arithmetic

Workbook

This book helps you practise written methods, large numbers, fractions and decimals from the Year 5 curriculum.

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 large numbers I can add numbers with more than four digits using the column method.			
2	Subtracting large numbers I can subtract numbers with more than four digits using the column method.			
3	Mental calculation I can add and subtract large numbers in my head.			
4	× and ÷ by 10, 100, 1000 I can multiply and divide whole numbers and decimals by 10, 100 and 1000.			
5	Square and cube numbers I can find square numbers and cube numbers.			
6	Short multiplication I can multiply numbers with up to four digits by a 1-digit number.			
7	Long multiplication (2-digit) I can multiply a 2-digit number by a 2-digit number.			
8	Long multiplication (3-digit) I can multiply a 3-digit number by a 2-digit number.			
9	Short division with remainders I can divide by a 1-digit number and write a remainder.			
10	Adding and subtracting fractions I can add and subtract fractions when one denominator is a multiple of the other.			
11	Multiplying fractions by whole numbers I can multiply fractions and mixed numbers by a whole number.			
12	Adding and subtracting decimals I can add and subtract decimals with up to two decimal places.			
13	Percentages I can use percentages, decimals and fractions, and find percentages of amounts.			



CHECK

Start test

Start test

Name _____ Date _____ Score _____ / 20

Work out the answers. Show your working.

1 $653,000 + 55,000 =$

2 $\times 1000 = 57,400$

3 $3^2 =$

4 $3^3 \times 8 =$

5 $2/5 + 7/15 =$

6 $5/6 - 1/2 =$

7 $8 \times 2/7 =$

8 $11.7 - 2.87 =$

9 $3/10 =$ %

10 75% of 220 =

11 $18 = 3 \times$

12 $+ 15,000 = 1,000,000$

13 $\times 1000 = 24,100$

14 $19.8 + 2.06 =$

15

		7	6	7
x				5

16

9	5	4	6

17

5	7	3	5

18

		8	5	7
+		2	3	0

19

	7	0	7	2
-		4	0	5

20

		6	0	8
x				6

1

UNIT 1 · LEARN IT

Adding large numbers

I can... add numbers with more than four digits using the column method.

Line up the digits carefully: ones under ones, tens under tens, and so on.

Start with the ones. Exchange when a column makes 10 or more.

Top tip: Estimate first so you can check your answer.

Key words

add

column

place value

exchange

Worked example

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

Use the column method.

1

		2	9	6	0	9
+			5	2	0	8

2

		4	9	2	4	4
+		4	6	7	6	5

3

		5	4	3	0	5
+			8	7	0	5

4

		4	8	5	2	0
+		7	9	9	5	9

5

		7	9	9	2	9
+			6	7	3	9

6

		1	7	9	2	8
+		6	3	3	2	5

7

		9	0	0	8	6
+			7	6	2	5

8

		8	7	7	9	7
+		8	0	2	0	4

9

		9	5	1	1	4
+			2	6	2	5

10

		5	3	6	9	8
+		8	2	3	1	5

11

		6	9	8	5	0
+			5	0	8	3

12

		2	5	9	2	9
+		1	2	6	1	0

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

Use the column method.

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

2			9	0	8	6	1	8
	+				9	6	1	5

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

4			3	5	8	5	9	3
	+				6	9	9	3

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

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

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

8			6	4	7	7	8	5
	+				6	5	3	3

9			5	6	9	4	2	5
	+			2	0	7	7	5

10			4	5	5	6	1	4
	+				5	0	9	9

11			6	8	1	8	8	4
	+			7	9	8	6	1

12			4	5	1	5	2	8
	+				5	5	9	5

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

2

UNIT 2 · LEARN IT

Subtracting large numbers

I can... subtract numbers with more than four digits using the column method.

Write the bigger number on top. Start with the ones.

If the top digit is too small, exchange from the next column.

With a zero, exchange from further along.

Top tip: Check by adding your answer to the number you took away.

Key words

subtract

column

exchange

difference

Worked example

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

Use the column method.

1

		1	2	7	7	6
-			5	5	2	9

2

			7	3	7	0	1
-			3	7	2	3	4

3

			2	5	9	3	5
-				9	9	3	8

4

			6	1	4	2	2
-			3	2	8	8	2

5

			2	4	6	7	2
-				1	7	1	6

6

			9	7	8	2	3
-			7	7	7	7	8

7

			4	4	3	3	6
-				1	9	2	1

8

			7	3	1	6	2
-			5	3	3	6	4

9

		1	0	0	6	4
-			9	1	7	5

10

			8	1	2	1	2
-			2	7	3	8	6

11

			2	0	6	4	8
-				8	2	5	4

12

			7	6	0	9	3
-			3	4	8	8	6

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

Use the column method.

1

		3	0	6	4	3	0
-			9	6	0	6	9

2

		1	6	1	4	3	0
-			3	3	6	3	1

3

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

4

	1	2	5	4	8	8
-		9	7	8	1	5

5

		3	9	4	0	0	4
-			6	9	0	4	8

6

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

7

		2	5	5	0	0	9
-			8	6	3	8	9

8

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

9

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

10

		9	9	2	2	1	2
-			7	1	2	8	8

11

		5	0	2	4	0	8
-			7	4	9	8	7

12

		8	8	2	8	8	0
-			6	7	0	8	4

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

Mental calculation

I can... add and subtract large numbers in my head.

Look at the digits that change. $45,000 + 7,000$: only the thousands change, so $45 + 7 = 52$ thousand.

You do not always need a written method.

Top tip: Say the number in thousands: 86,400 is 86 thousand 4 hundred.

Key words

mental

thousands

place value

partition

Worked example

$$45,000 + 7,000 = \boxed{52,000}$$

Work out the answers.

1 $87,300 - 5000 =$

2 $983,000 + 34,000 =$

3 $96,000 + 2000 =$

4 $734,000 + 28,000 =$

5 $18,700 - 800 =$

6 $80,000 - 5000 =$

7 $10,400 - 800 =$

8 $80,252 - 100 =$

9 $47,600 - 7000 =$

10 $22,000 + 2000 =$

11 $71,716 - 10,000 =$

12 $71,542 - 10 =$

13 $45,300 - 6000 =$

14 $45,000 + 7000 =$

15 $566,000 + 15,000 =$

16 $23,000 + 800 =$

17 $48,100 - 500 =$

18 $22,200 - 5000 =$

19 $17,000 + 5000 =$

20 $62,143 - 10 =$

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

Find the missing numbers.

1 $100,000 - \square = 29,000$

2 $21,000 - \square = 17,700$

3 $50,000 - \square = 45,200$

4 $1,000,000 - \square = 932,000$

5 $25,000 - \square = 23,800$

6 $89,000 - \square = 83,000$

7 $10,000 - \square = 4800$

8 $89,000 - \square = 83,700$

9 $56,000 - \square = 53,500$

10 $50,000 - \square = 49,500$

11 $93,000 - \square = 86,700$

12 $12,000 - \square = 5200$

13 $86,000 - \square = 84,100$

14 $\square + 7000 = 10,000$

15 $50,000 - \square = 40,300$

16 $32,000 - \square = 23,500$

17 $33,000 - \square = 24,900$

18 $85,000 - \square = 81,700$

19 $\square + 300 = 50,000$

20 $1,000,000 - \square = 929,000$

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

× and ÷ by 10, 100, 1000

I can... multiply and divide whole numbers and decimals by 10, 100 and 1000.

× 10 moves the digits one place left. × 100 moves them two places. × 1000 moves them three places.

÷ 10, ÷ 100 and ÷ 1000 move the digits right in the same way.

Top tip: Count the zeros: that is how many places the digits move.

Key words

place value

decimal point

tenths

thousand

Worked example

$$3.6 \times 100 = \boxed{360}$$

Work out the answers.

1 $33.6 \times 10 =$

2 $60 \times 100 =$

3 $\times 1000 =$
22,000

4 $8408 \div 1000 =$

5 $0.8 \times 100 =$

6 $5481 \div 1000 =$

7 $0.01 \times 100 =$

8 $32 \times 1000 =$

9 $40,000 \div 1000 =$

10 $6100 \div 100 =$

11 $0.27 \times 100 =$

12 $5580 \div 100 =$

13 $5058 \div 10 =$

14 $0.61 \times 100 =$

15 $0.04 \times 100 =$

16 $0.15 \times 100 =$

17 $80 \div 10 =$

18 $62 \times 100 =$

19 $5.69 \times 10 =$

20 $0.6 \times 1000 =$

21 $39 \times 10 =$

22 $21 \times 10 =$

23 $5493 \div 10 =$

24 $7600 \div 100 =$

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

Work out the answers.

1 $\boxed{} \times 1000 =$
22,700

2 $0.04 \times 1000 =$
 $\boxed{}$

3 $74 \div 100 = \boxed{}$

4 $57 \times 1000 =$
 $\boxed{}$

5 $24 \times 1000 =$
 $\boxed{}$

6 $66 \div 10 = \boxed{}$

7 $\boxed{} \times 1000 =$
20,800

8 $12 \times 1000 =$
 $\boxed{}$

9 $1 \div 10 = \boxed{}$

10 $2.81 \times 10 = \boxed{}$

11 $\boxed{} \times 100 = 6620$

12 $92 \div 10 = \boxed{}$

13 $280 \div 10 = \boxed{}$

14 $95 \div 100 = \boxed{}$

15 $6 \div 10 = \boxed{}$

16 $8768 \div 100 = \boxed{}$

17 $9.85 \times 100 = \boxed{}$

18 $39 \div 10 = \boxed{}$

19 $85 \times 100 = \boxed{}$

20 $0.39 \times 100 = \boxed{}$

21 $\boxed{} \times 10 = 290$

22 $63 \times 10 = \boxed{}$

23 $\boxed{} \times 10 = 118$

24 $88 \div 10 = \boxed{}$

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

Square and cube numbers

I can... find square numbers and cube numbers.

A square number is a number times itself. 6^2 means $6 \times 6 = 36$.

A cube number is a number times itself three times. 4^3 means $4 \times 4 \times 4 = 64$.

Top tip: The small 2 means squared. The small 3 means cubed.

Key words

square number

cube number

squared

cubed

Worked example

$$4^3 =$$

64

Work out the answers.

1 $11^2 =$

2 $4^3 =$

3 $8 \times 8^2 =$

4 $1^2 =$

5 $1^3 =$

6 $5 \times 10^2 =$

7 $3^2 =$

8 $7^2 =$

9 $9^2 + 7 =$

10 $4^2 =$

11 $9^2 =$

12 $4 \times 3^2 =$

13 $6^2 =$

14 $5^3 =$

15 $4 \times 2^2 =$

16 $3^3 =$

17 $12^2 =$

18 $4 \times 4^2 =$

19 $8^2 =$

20 $2^3 =$

21 $4^2 + 3 =$

22 $2^2 =$

23 $10^2 =$

24 $6 \times 6^2 =$

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

Work out the answers.

1 $7^2 + 4^2 = \boxed{}$

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

3 $\boxed{}^3 = 8$

4 $4^3 \times 7 = \boxed{}$

5 $2^2 + 6^2 = \boxed{}$

6 $5^3 \times 3 = \boxed{}$

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

8 $4^3 \times 2 = \boxed{}$

9 $5^3 \times 9 = \boxed{}$

10 $8^2 + 9^2 = \boxed{}$

11 $2^2 + 3^2 = \boxed{}$

12 $5^3 + 9^2 = \boxed{}$

13 $2^3 \times 4 = \boxed{}$

14 $4^3 + 8^2 = \boxed{}$

15 $4^3 + 9^2 = \boxed{}$

16 $3^3 + 5^2 = \boxed{}$

17 $3^3 + 8^2 = \boxed{}$

18 $2^3 + 7^2 = \boxed{}$

19 $3^3 + 4^2 = \boxed{}$

20 $\boxed{}^3 = 64$

21 $2^3 + 6^2 = \boxed{}$

22 $\boxed{}^2 = 36$

23 $\boxed{}^2 = 144$

24 $\boxed{}^2 = 121$

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

Short multiplication

I can... multiply numbers with up to four digits by a 1-digit number.

Multiply each digit by the 1-digit number, starting with the ones.

Write the ones digit and carry the tens. Add the carried number after the next multiplication.

Top tip: Write carried numbers small, under the answer line.

Key words

multiply

short multiplication

carry

product

Worked example

		3	7	4	6
×					7
	2	6	2	2	2

Use the column method.

1

		6	0	2
x				5

2

			9	9	2	1
x						5

3

			9	6	1
x					6

4

			8	8	7	4
x						5

5

			9	2	4
x					6

6

			5	0	3	9
x						5

7

		1	3	9
x				7

8

			4	8	9	2
x						5

9

			7	9	5
x					9

10

				9	5	4	5
x							5

11

				8	4	8
x						9

12

				4	3	4	5
x							3

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

Use the column method.

1

			3	9	8	8
x						6

2

			2	1	8	1
x						9

3

			3	9	2	6
x						9

4

			1	4	2	5
x						9

5

			4	5	1	4
x						7

6

			9	0	9	9
x						9

7

			3	0	0	6
x						6

8

			8	6	9	6
x						6

9

	1	0	7	2
x				6

10

			3	3	8	3
x						7

11

			5	2	4	6
x						8

12

			6	8	2	8
x						6

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

Long multiplication (2-digit)

Use long multiplication.

Use long multiplication.

Long multiplication (3-digit)

I can... multiply a 3-digit number by a 2-digit number.

Multiply the 3-digit number by the ones digit. Then multiply by the tens digit, with a 0 place holder.

Add the two rows to find the answer.

Top tip: Estimate first: 386×24 is about $400 \times 20 = 8,000$.

Key words

long multiplication

row

place holder

add

Worked example

[illegible]

Use long multiplication.

Use long multiplication.

Short division with remainders

I can... divide by a 1-digit number and write a remainder.

Divide each digit from the left. Carry what is left over to the next digit.

If something is left at the end, it is the remainder. Write it after r.

Top tip: The remainder must be smaller than the divisor.

Key words

divide

short division

remainder

divisor

Worked example

		7	8	8	r 3
6	4	7	3	1	

Use short division.

1

6	5	0	7

2

9	5	1	3

3

8	4	3	4

4

7	4	1	3

5

4	7	6	5

6

3	7	3	8

7

6	3	4	0

8

7	7	4	9

9

5	3	7	1

10

5	6	6	5

11

9	5	3	3

12

6	5	1	6

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

Use short division.

1

7	6	7	9	8

2

4	9	5	5	9

3

8	8	7	7	9

4

7	1	1	9	8

5

9	6	9	9	2

6

4	9	7	9	1

7

5	4	0	3	6

8

6	6	6	0	7

9

5	7	8	0	3

10

5	1	3	8	8

11

6	7	4	8	5

12

7	2	1	7	1

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

Adding and subtracting fractions

I can... add and subtract fractions when one denominator is a multiple of the other.

Make the denominators the same first. For $\frac{1}{3} + \frac{2}{9}$, change $\frac{1}{3}$ to $\frac{3}{9}$.

Then add the numerators: $\frac{3}{9} + \frac{2}{9} = \frac{5}{9}$.

Top tip: Give answers bigger than 1 as mixed numbers.

Worked example

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

Key words

denominator

equivalent

multiple

simplest form

Give your answer as a fraction in its simplest form.

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

2 $\frac{4}{5} - \frac{1}{15} =$

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

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

5 $\frac{5}{12} + \frac{1}{3} =$

6 $\frac{7}{9} - \frac{2}{3} =$

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

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

9 $\frac{4}{5} + \frac{1}{10} =$

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

11 $\frac{8}{15} + \frac{2}{5} =$

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

13 $\frac{1}{2} + \frac{1}{6} =$

14 $\frac{5}{6} - \frac{7}{12} =$

15 $\frac{9}{20} + \frac{1}{5} =$

16 $\frac{11}{12} - \frac{1}{3} =$

17 $\frac{7}{15} + \frac{1}{5} =$

18 $\frac{8}{9} - \frac{1}{3} =$

19 $\frac{4}{15} + \frac{3}{5} =$

20 $\frac{3}{4} - \frac{1}{2} =$

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

Give your answer as a fraction in its simplest form.

1 $7/15 + 3/5 =$

2 $5/8 - 1/2 =$

3 $13/15 + 3/5 =$

4 $7/8 - 1/2 =$

5 $2/3 + 11/12 =$

6 $1/2 - 1/4 =$

7 $1/2 + 3/4 =$

8 $3/4 - 1/2 =$

9 $7/8 + 3/4 =$

10 $13/15 - 1/5 =$

11 $9/10 + 4/5 =$

12 $14/15 - 3/5 =$

13 $3/5 + 19/20 =$

14 $1/2 - 1/6 =$

15 $2/3 + 5/9 =$

16 $1/2 - 1/8 =$

17 $2/5 + 17/20 =$

18 $13/20 - 2/5 =$

19 $3/4 + 3/8 =$

20 $5/6 - 1/2 =$

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

Multiplying fractions by whole numbers

I can... multiply fractions and mixed numbers by a whole number.

Multiply the numerator by the whole number. The denominator stays the same.

$2/5 \times 3 = 6/5$. This is more than 1, so write it as $1\frac{1}{5}$.

Top tip: For a mixed number, multiply the whole part and the fraction part.

Key words

fraction

whole number

mixed number

improper fraction

Worked example

$$2/5 \times 3 = 1\frac{1}{5}$$

Give your answer as a fraction in its simplest form.

1 $1/3 \times 3 =$

2 $3 \times 5/11 =$

3 $5 \times 1/3 =$

4 $2 \times 6/7 =$

5 $4 \times 5/6 =$

6 $9 \times 5/8 =$

7 $11/12 \times 5 =$

8 $1/2 \times 7 =$

9 $3 \times 3/8 =$

10 $1/2 \times 4 =$

11 $5/12 \times 3 =$

12 $3 \times 1/7 =$

13 $8 \times 1/7 =$

14 $6 \times 2/3 =$

15 $7 \times 1/4 =$

16 $6 \times 8/11 =$

17 $1/5 \times 6 =$

18 $1/2 \times 3 =$

19 $8 \times 1/2 =$

20 $3 \times 3/5 =$

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

Give your answer as a fraction in its simplest form.

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

2 $3\frac{4}{7} \times 4 =$

3 $3\frac{7}{10} \times 6 =$

4 $2\frac{9}{10} \times 5 =$

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

6 $2\frac{5}{9} \times 3 =$

7 $3\frac{2}{9} \times 4 =$

8 $3\frac{4}{11} \times 3 =$

9 $3\frac{6}{11} \times 4 =$

10 $2\frac{3}{5} \times 4 =$

11 $3\frac{1}{5} \times 6 =$

12 $3\frac{2}{5} \times 6 =$

13 $1\frac{6}{7} \times 5 =$

14 $2\frac{2}{7} \times 4 =$

15 $2\frac{7}{11} \times 4 =$

16 $2\frac{10}{11} \times 2 =$

17 $2\frac{1}{8} \times 3 =$

18 $3\frac{3}{8} \times 3 =$

19 $1\frac{1}{2} \times 4 =$

20 $3\frac{1}{2} \times 5 =$

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

Adding and subtracting decimals

I can... add and subtract decimals with up to two decimal places.

Line up the decimal points. Fill empty places with 0, so 4.5 becomes 4.50.

Then use the column method, and put the decimal point in the answer.

Top tip: Decimal points must be in a straight line.

Key words

decimal

decimal point

tenths

hundredths

Worked example

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

Use the column method.

1

	3	8	.	1	0
+		1	.	0	4

2

	3	0	.	6	0
-		1	.	2	0

3

			6	.	9
+		2	8	.	8

4

	2	8	.	7
-		8	.	4

5

	2	3	.	8	0
+		5	.	3	0

6

		3	5	.	5	0
-		3	0	.	4	3

7

		1	2	.	2	7
+		2	2	.	5	0

8

		3	5	.	6	6
-		3	2	.	8	1

9

		3	8	.	7	5
+		2	7	.	1	5

10

	1	2	.	2	8
-		2	.	5	1

11

			4	.	5	0
+		2	9	.	7	0

12

		1	2	.	3	9
-		1	0	.	6	0

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

Work out the answers.

1 $0.79 + 0.4 =$

2 $8 - 7.92 =$

3 $27.1 + 4.2 =$

4 $0.58 + 0.6 =$

5 $1 - 0.24 =$

6 $1 - 0.4 =$

7 $12 - 6.75 =$

8 $11.1 - 4.75 =$

9 $20.5 + 7.26 =$

10 $23.2 + 7.57 =$

11 $1 - 0.96 =$

12 $16 - 3.74 =$

13 $12 + 8.93 =$

14 $29.2 + 2.1 =$

15 $1 - 0.32 =$

16 $21.4 + 7.34 =$

17 $0.69 + 0.3 =$

18 $10.3 - 1.61 =$

19 $1 - 0.06 =$

20 $10.1 - 4.58 =$

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

Percentages

I can... use percentages, decimals and fractions, and find percentages of amounts.

Per cent means 'out of 100'. $37\% = 37/100 = 0.37$.

To find 10% of an amount, divide by 10. To find 50%, divide by 2.

Top tip: 25% is the same as $1/4$. 75% is the same as $3/4$.

Worked example

$$10\% \text{ of } 350 = \boxed{35}$$

Key words

per cent

percentage

decimal

hundredth

Work out the answers.

1 $0.52 = \boxed{} \%$

2 $0.9 = \boxed{} \%$

3 $92/100 = \boxed{}$

4 $0.31 = \boxed{} \%$

5 $28/100 = \boxed{}$

6 $0.61 = \boxed{} \%$

7 $0.64 = \boxed{} \%$

8 $0.71 = \boxed{} \%$

9 $45\% = \boxed{}/100$

10 $35\% = \boxed{}/100$

11 $58\% = \boxed{}/100$

12 $1/20 = \boxed{} \%$

13 $0.67 = \boxed{} \%$

14 $87\% = \boxed{}/100$

15 $73/100 = \boxed{}$

16 $27/100 = \boxed{}$

17 $60\% \text{ as a decimal} = \boxed{}$

18 $30\% \text{ as a decimal} = \boxed{}$

19 $67\% = \boxed{}/100$

20 $7\% = \boxed{}/100$

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

Work out the answers.

1 10% of 360 =

2 20% of 260 =

3 5% of 80 =

4 75% of 460 =

5 75% of 360 =

6 25% of 80 =

7 75% of 20 =

8 10% of 20 =

9 20% of 220 =

10 50% of 560 =

11 10% of 560 =

12 75% of 100 =

13 5% of 100 =

14 25% of 440 =

15 50% of 400 =

16 1% of 400 =

17 5% of 280 =

18 50% of 460 =

19 20% of 300 =

20 5% of 20 =

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 $48,049 - 10,000 =$

2 $7600 \div 100 =$

3 $8^2 =$

4 $7^2 + 6^2 =$

5 $3/5 + 4/15 =$

6 $2/3 - 1/9 =$

7 $5 \times 4/5 =$

8 $12.7 - 4.55 =$

9 $0.02 =$ %

10 75% of 100 =

11 $7 \times$ $= 56$

12 $46,000 -$ $= 40,400$

13 $\times 10 = 893$

14 $13.3 + 2.59 =$

15

		3	8	1
x				7

16

6	1	2	2

17

5	1	3	0

18

		3	0	1
+		9	2	5

19

	1	7	3	6
-		3	8	8

20

		1	2	8
x				9

**Start test**

1 708,000 2 57.4 3 9 4 216 5 13/15 6 1/3 7 2 2/7 8
8.83 9 30 10 165 11 6 12 985,000 13 24.1 14 21.86 15
3835 16 60 r 6 17 147 18 1087 19 6667 20 3648

Unit 1 · Sheet A — Adding large numbers

1 34,817 2 96,009 3 63,010 4 128,479 5 86,668 6
81,253 7 97,711 8 168,001 9 97,739 10 136,013 11
74,933 12 38,539

Unit 1 · Sheet B — Adding large numbers

1 294,512 2 918,233 3 874,931 4 365,586 5 235,047 6
268,581 7 838,059 8 654,318 9 590,200 10 460,713 11
761,745 12 457,123

Unit 2 · Sheet A — Subtracting large numbers

1 7247 2 36,467 3 15,997 4 28,540 5 22,956 6 20,045
7 42,415 8 19,798 9 889 10 53,826 11 12,394 12 41,207

Unit 2 · Sheet B — Subtracting large numbers

1 210,361 2 127,799 3 227,138 4 27,673 5 324,956 6
610,574 7 168,620 8 607,669 9 787,511 10 920,924 11
427,421 12 815,796

Unit 3 · Sheet A — Mental calculation

1 82,300 2 1,017,000 3 98,000 4 762,000 5 17,900 6
75,000 7 9600 8 80,152 9 40,600 10 24,000 11
61,716 12 71,532 13 39,300 14 52,000 15 581,000 16
23,800 17 47,600 18 17,200 19 22,000 20 62,133

Unit 3 · Sheet B — Mental calculation

1 71,000 2 3300 3 4800 4 68,000 5 1200 6 6000 7
5200 8 5300 9 2500 10 500 11 6300 12 6800 13
1900 14 3000 15 9700 16 8500 17 8100 18 3300 19
49,700 20 71,000

Unit 4 · Sheet A — × and ÷ by 10, 100, 1000

1 336 2 6000 3 22 4 8.408 5 80 6 5.481 7 1 8
32,000 9 40 10 61 11 27 12 55.8 13 505.8 14 61 15
4 16 15 17 8 18 6200 19 56.9 20 600 21 390 22
210 23 549.3 24 76

Unit 4 · Sheet B — × and ÷ by 10, 100, 1000

1 22.7 2 40 3 0.74 4 57,000 5 24,000 6 6.6 7 20.8 8
12,000 9 0.1 10 28.1 11 66.2 12 9.2 13 28 14 0.95 15
0.6 16 87.68 17 985 18 3.9 19 8500 20 39 21 29 22
630 23 11.8 24 8.8

Unit 5 · Sheet A — Square and cube numbers

1 121 2 64 3 512 4 1 5 1 6 500 7 9 8 49 9 88 10
16 11 81 12 36 13 36 14 125 15 16 16 27 17 144 18
64 19 64 20 8 21 19 22 4 23 100 24 216

Unit 5 · Sheet B — Square and cube numbers

1 65 2 17 3 2 4 448 5 40 6 375 7 12 8 128 9 1125
10 145 11 13 12 206 13 32 14 128 15 145 16 52 17
91 18 57 19 43 20 4 21 44 22 6 23 12 24 11

Unit 6 · Sheet A — Short multiplication

1 3010 2 49,605 3 5766 4 44,370 5 5544 6 25,195 7
973 8 24,460 9 7155 10 47,725 11 7632 12 13,035

Unit 6 · Sheet B — Short multiplication

1 23,928 2 19,629 3 35,334 4 12,825 5 31,598 6 81,891
7 18,036 8 52,176 9 6432 10 23,681 11 41,968 12
40,968

Unit 7 · Sheet A — Long multiplication (2-digit)

1 2604 2 288 3 2407 4 969 5 228 6 3895 7 1620 8
1035 9 5238 10 2565 11 1404 12 4408

Unit 7 · Sheet B — Long multiplication (2-digit)

1 735 2 3640 3 665 4 2788 5 1470 6 1978 7 1984 8
8277 9 3456 10 1863 11 1403 12 1488

Unit 8 · Sheet A — Long multiplication (3-digit)

1 39,223 2 16,569 3 18,312 4 63,147 5 40,824 6 13,632
7 1584 8 21,476 9 45,406 10 34,782 11 12,293 12
51,492

Unit 8 · Sheet B — Long multiplication (3-digit)

1 20,514 2 51,333 3 28,890 4 33,626 5 50,552 6 6030
7 10,464 8 75,594 9 5130 10 73,467 11 86,826 12
10,526

Unit 9 · Sheet A — Short division with remainders

1 84r3 2 57 3 54r2 4 59 5 191r1 6 246 7 56r4 8
107 9 74r1 10 133 11 59r2 12 86

Unit 9 · Sheet B — Short division with remainders

1 971r1 2 2389r3 3 1097r3 4 171r1 5 776r8 6 2447r
3 7 807r1 8 1101r1 9 1560r3 10 277r3 11 1247r3
12 310r1

Unit 10 · Sheet A — Adding and subtracting fractions

1 3/4 2 11/15 3 3/4 4 1/4 5 3/4 6 1/9 7 5/6 8 7/10
9 9/10 10 3/8 11 14/15 12 1/12 13 2/3 14 1/4 15
13/20 16 7/12 17 2/3 18 5/9 19 13/15 20 1/4

Unit 10 · Sheet B — Adding and subtracting fractions

1 11/15 2 1/8 3 17/15 4 3/8 5 17/12 6 1/4 7 11/4 8
1/4 9 15/8 10 2/3 11 17/10 12 1/3 13 11/20 14
1/3 15 12/9 16 3/8 17 11/4 18 1/4 19 11/8 20 1/3

Unit 11 · Sheet A — Multiplying fractions by whole numbers

1 1 2 14/11 3 12/3 4 15/7 5 31/3 6 55/8 7 47/12 8
31/2 9 11/8 10 2 11 11/4 12 3/7 13 11/7 14 4 15 1
3/4 16 44/11 17 11/5 18 11/2 19 4 20 14/5

Unit 11 · Sheet B — Multiplying fractions by whole numbers

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

Unit 12 · Sheet A — Adding and subtracting decimals

1 39.14 **2** 29.4 **3** 35.7 **4** 20.3 **5** 29.1 **6** 5.07 **7** 34.77 **8** 2.85
9 65.9 **10** 9.77 **11** 34.2 **12** 1.79

Unit 12 · Sheet B — Adding and subtracting decimals

1 1.19 **2** 0.08 **3** 31.3 **4** 1.18 **5** 0.76 **6** 0.6 **7** 5.25 **8** 6.35
9 27.76 **10** 30.77 **11** 0.04 **12** 12.26 **13** 20.93 **14** 31.3 **15** 0.68
16 28.74 **17** 0.99 **18** 8.69 **19** 0.94 **20** 5.52

Unit 13 · Sheet A — Percentages

1 52 **2** 90 **3** 0.92 **4** 31 **5** 0.28 **6** 61 **7** 64 **8** 71 **9** 45
10 35 **11** 58 **12** 5 **13** 67 **14** 87 **15** 0.73 **16** 0.27 **17** 0.6
18 0.3 **19** 67 **20** 7

Unit 13 · Sheet B — Percentages

1 36 **2** 52 **3** 4 **4** 345 **5** 270 **6** 20 **7** 15 **8** 2 **9** 44 **10** 280
11 56 **12** 75 **13** 5 **14** 110 **15** 200 **16** 4 **17** 14 **18** 230
19 60 **20** 1

End test

1 38,049 **2** 76 **3** 64 **4** 85 **5** $13\frac{13}{15}$ **6** $5\frac{5}{9}$ **7** 4 **8** 8.15 **9** 2
10 75 **11** 8 **12** 5600 **13** 89.3 **14** 15.89 **15** 2667 **16** 20
17 26 **18** 1226 **19** 1348 **20** 1152