

Arithmetics

Syllabus tracker [Open it online](#)

Name: _____

Date: _____

Tick one circle for each statement — on screen (click) or with a pen. Then try the quick checks: write your answer in the box, check it against the answers at the end, and tick “right” when you got it.

Types of number

Primes, squares, cubes, factors, multiples, rational and irrational numbers, reciprocals.

	Don't know	Shaky	Got it
I can recognise primes, squares, cubes, factors and multiples.	☐	☐	☐
I can tell rational numbers from irrational numbers.	☐	☐	☐
I can find the reciprocal of a number.	☐	☐	☐

Order of operations and negatives

BIDMAS, brackets and negative numbers, including in real situations.

	Don't know	Shaky	Got it
I can use the order of operations, including brackets and negative numbers.	☐	☐	☐
I can calculate with negative numbers in real situations.	☐	☐	☐

Fractions and decimals

The four operations with fractions, mixed numbers and decimals; ordering quantities.

	Don't know	Shaky	Got it
I can add, subtract, multiply and divide fractions and mixed numbers.	☐	☐	☐
I can multiply and divide decimals without a calculator.	☐	☐	☐
I can order fractions, decimals and percentages.	☐	☐	☐

Halfway values and differences

The number halfway between two values and the difference between them.

	Don't know	Shaky	Got it
I can find the number halfway between two numbers.	☐	☐	☐
I can find the difference between two values, including negatives.	☐	☐	☐

Recurring decimals

Converting recurring decimals to fractions.

	Don't know	Shaky	Got it
I can convert a one-digit recurring decimal to a fraction.	☐	☐	☐
I can convert a longer recurring decimal to a fraction in its simplest form.	☐	☐	☐

Quick checks

One quick question per statement. Answer in the box, then check the answers at the end.

1. Which of these is a prime number?

A 21 **B** 27 **C** 29 **D** 33

Answer: _____

☐ I got it right

2. Which of these is irrational?

A $\sqrt{16}$ **B** 0.333... **C** $\sqrt{7}$ **D** $\frac{22}{7}$

Answer: _____

☐ I got it right

3. What is the reciprocal of $\frac{2}{5}$? Give it as a decimal.

Answer: _____

☐ I got it right

4. Work out $3 + 4 \times (6 - 8)$.

Answer: _____

☐ I got it right

5. The temperature is -7°C at night and 5°C at noon. By how many degrees did it rise?

Answer: _____

☐ I got it right

6. Work out $1\frac{2}{3} \div \frac{5}{6}$.

Answer: _____

☐ I got it right

7. Work out 0.3×0.04 .

Answer: _____

☐ I got it right

8. Which is the largest?

A $\frac{3}{5}$ **B** 0.58 **C** 62% **D** 0.6

Answer: _____

☐ I got it right

9. What number is halfway between -3.4 and 7.2 ?

Answer: _____

☐ I got it right

10. Find the difference between -12 and 9 .

Answer: _____

☐ I got it right

11. Write $0.444\ldots$ as a fraction.

Answer: _____

☐ I got it right

12. Write $0.272727\ldots$ as a fraction in its simplest form.

Answer: _____

☐ I got it right

Answers

Try every question first, then check.

1. C: 29

2. C: $\sqrt{7}$

3. 2.5

4. -5

5. 12

6. 2

7. 0.012

8. C: 62%

9. 1.9

10. 21

11. $\frac{4}{9}$

12. $\frac{3}{11}$