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# GCSE AQA Maths (8300) Foundation Tier
## Question Paper

Fully inlined with first assessment 2026 and suitable for students sitting exams 2026+

**Topic  - Numbers**

**Sub Topic Test 1 - Indices - Foundation**

**Marks: 20**

**Total Marks:    / 20**

# Topic Test 1 (20 minutes)
## Indices - Foundation

## Section A
10 minutes. Calculator.

**1**     What whole number power of 2 is 1024?

**[1 mark]**

Answer _____

**2**     Circle the number that is a power of 7

**[1 mark]**

   14              77              343              490

**3**     Use your calculator to work out

**3(a)**   $\dfrac{\sqrt{33}.64}{19.8 \quad 9.2}$

**[1 mark]**

Answer _____

**3(b)**   How much less than 1000 is 9.83?

**[1 mark]**

Answer _____

**4**   Work out   $\dfrac{27 \times 35}{6^3}$

**[1 mark]**

Answer _____

**5(a)**   Write $11^{20} \div 114$ as a single power of 11

**[1 mark]**

Answer _____

**5(b)**   Write 45 as a single power of 2

**[1 mark]**

Answer _____

**6**   Write 91 as the sum of two cube numbers.

**[1 mark]**

Answer _____

**7** Raj and his sister Zia are both at secondary school.
Raj is three years older than Zia.
The sum of the squares of their ages is 369

How old are they?

**[2 marks]**

Zia = _____ years old

Raj = _____ years old

## Section B
10 minutes. Non-calculator. Put your calculator away. You may still work on section A but you must **not** use a calculator.

**8** Circle the number that is 1 **more** than a cube number

**[1 mark]**

10          26          37          65

**9** Circle the number that is **not** a whole number power of 3

**[1 mark]**

9          18          27          81

**10** Write down the value of $\sqrt{196}$

**[1 mark]**

Answer _____

**11** Work out $\sqrt{2^4 \square 3^2}$

**[2 marks]**

Answer _____

**12** Write $\sqrt{1\ \text{million}}$ as a power of 10

**[1 mark]**

Answer _____

**13** Solve the equation $\quad x^2 - 1 = 48$

**[2 marks]**

Answer _____

**14** Tina says,

"The difference between any 2 consecutive square numbers is **always** odd."

Is she correct?

Yes ☐  No ☐

Give reasons for your answer.

**[2 marks]**

_____

_____

_____

_____

_____

_____