

# Using a Calculator

## Difficulty: Hard

### Question Paper 1

|            |                    |
|------------|--------------------|
| Level      | IGCSE              |
| Subject    | Maths (0580/0980)  |
| Exam Board | CIE                |
| Topic      | Number             |
| Sub-Topic  | Using a Calculator |
| Paper      | Paper 2            |
| Difficulty | Hard               |
| Booklet    | Question Paper 1   |

**Time allowed:** 26 minutes

**Score:** /20

**Percentage:** /100

#### Grade Boundaries:

##### CIE IGCSE Maths (0580)

| A*   | A   | B   | C   | D   | E   |
|------|-----|-----|-----|-----|-----|
| >88% | 76% | 63% | 51% | 40% | 30% |

##### CIE IGCSE Maths (0980)

| 9    | 8   | 7   | 6   | 5   | 4   | 3   |
|------|-----|-----|-----|-----|-----|-----|
| >94% | 85% | 77% | 67% | 57% | 47% | 35% |

## Question 1

(a) Use a calculator to work out  $\frac{5^{0.4} - \sqrt{3}}{0.13 - 0.015}$ .

Write down all the digits in your calculator display. [1]

(b) Write your answer to **part (a)** correct to 2 significant figures. [1]

## Question 2

The thickness of one sheet of paper is  $8 \times 10^{-3}$  cm.

Work out the thickness of 250 sheets of paper. [1]

## Question 3

Calculate  $\sqrt{120} + 3.8^2 - 25$ . [1]

### Question 4

Calculate  $\sqrt{\frac{1}{2}(1 - \cos 48^\circ)}$ . [1]

### Question 5

Calculate.

(a)  $2^3 - \sqrt{10 + 4^2}$  [1]

(b)  $\frac{2\sqrt{3} \times \tan 70^\circ}{3}$  [1]

### Question 6

Find the cube root of 4913. [1]

## Question 7

Use your calculator to work out  $\sqrt{\frac{3}{4}} + 2^{-1}$ .

Give your answer correct to 2 decimal places.

[2]

## Question 8

(a) Use your calculator to find the value of  $7.5^{-0.4} \div \sqrt{57}$ .  
Write down your full calculator display.

[1]

(b) Write your answer to **part (a)** in standard form.

[1]

## Question 9

(a) Calculate  $\sqrt{5.7} - 1.03^2$ .

Write down all the numbers displayed on your calculator. [1]

(b) Write your answer to **part (a)** correct to 3 decimal places. [1]

## Question 10

Use a calculator to find

(a)  $\sqrt{5\frac{5}{24}}$ , [1]

(b)  $\frac{\cos 40^\circ}{7}$ . [1]

**Question 11**

$$m = \frac{1}{4}[3h^2 + 8ah + 3a^2]$$

Calculate the exact value of  $m$  when  $h = 20$  and  $a = -5$ .

[2]

**Question 12**

Calculate  $3\sin 120^\circ - 4(\sin 120^\circ)^3$ .

[2]