

Using a Calculator

Question Paper

Course	Edexcel IGCSE Maths
Section	1. Numbers & the Number System
Topic	Using a Calculator
Difficulty	Medium

Time allowed: 30
Score: /25
Percentage: /100

Question 1

Calculate the value of $\sqrt{\frac{\tan 60^\circ + 1}{\tan 60^\circ - 1}}$

Write down all the figures on your calculator display.
You must give your answer as a decimal.

[2 marks]

Question 2a

Use your calculator to work out $\frac{\sqrt{70.25}}{4.2 - 2.37}$

Write down all the figures on your calculator display.
You must give your answer as a decimal.

[2 marks]

Question 2b

Write your answer to part (a) correct to 4 decimal places.

[1 mark]

Question 3

Use your calculator to work out $\frac{1.45^2}{3.89 - \sqrt{5.75}}$

Write down all the figures on your calculator display.
You must give your answer as a decimal.

[2 marks]

Question 4a

Use your calculator to work out $\sqrt{\frac{\sin 25^\circ + \sin 40^\circ}{\cos 25^\circ - \cos 40^\circ}}$

Write down all the figures on your calculator display.

[2 marks]

Question 4b

Write your answer to part (a) correct to 2 decimal places.

[1 mark]

Question 5

Work out $\frac{5.6 \times 10^4 + 7 \times 10^3}{2.8 \times 10^{-3}}$

Give your answer in standard form.

[2 marks]

Question 6

Work out $\frac{3 \times 10^5 - 2.7 \times 10^4}{6 \times 10^{-2}}$

[2 marks]

Question 7

An approximation for the value of π is given by

$$4\left(1 - \frac{22}{57} + \frac{22}{85} - \frac{22}{105} + \frac{22}{117} - \frac{22}{242}\right)$$

Use your calculator to show that this approximation is within 0.1 of 3.14

[2 marks]

Question 8

Work out $\frac{3.2 \times 10^3 + 5.1 \times 10^{-2}}{4.3 \times 10^{-4}}$

Give your answer in standard form, correct to 3 significant figures.

[2 marks]

Question 9

Use a calculator to find the decimal value of $\frac{\sqrt{29 - 3 \times 32^{0.4}}}{3}$.

[1 mark]

Question 10

Calculate.

$$\frac{16.379 - 0.879}{4.2} \times 1.241$$

Give your answer correct to 2 significant figures.

[2 marks]

Question 11

Calculate $\sqrt{256^{0.25} + 4 \times 8}$.

[1 mark]

Question 12

Calculate $\sqrt[3]{8.1^2 - 1.3^{0.8}}$.

[1 mark]

Question 13

$\sqrt[3]{2^3 + 2}$

[1 mark]

Question 14

Calculate $\sqrt{17.8} - 1.3^{2.5}$.

[1 mark]