Surname	
Other Names	
Candidate's Signature	

GCSE 9 - 1 Questions

Powers and Roots

Calculator Allowed

INSTRUCTIONS TO CANDIDATES

Write your name in the space provided.

Write your answers in the spaces provided in this question paper.

Answer ALL questions.

Any working should be clearly shown in the spaces provided since marks may be awarded for partially correct solutions.

Total Marks :

1)

(a) Calculate 126×351.
     Give your answer correct to the nearest thousand.   [2]

....

....

(b) Calculate $\sqrt{253}$.
     Give your answer correct to the nearest whole number.   [2]

....

....

2)

(a) Write down the value of $\sqrt{0.49}$.   [1]

....

....

(b) Write down the exact value of 5.8^2.   [1]

....

....

(c) Aron claims that, when a number is squared, the answer cannot be smaller than the number that was squared.
     Explain, by using an example, that Aron's claim is false.   [1]

....

....

....

3)

Find the exact value of each of the following.

(a) $5 \cdot 6^2$ [1]

....

(b) 4 to the power of 5 [1]

....

(c) the square root of 28·09 [1]

....

4)

Evaluate $\sqrt{25 \cdot 6^3 - 17 \cdot 2}$, correct to two significant figures. [2]

....

....

5)

(a)   Calculate the cube root of 125.   [1]

....

(b)   Calculate the value of 1·4 cubed.   [1]

....

(c)   Find the value of $\sqrt{25\cdot3} + 2\cdot3^2$. Write down your answer to 1 significant figure.   [2]

....

....

(d)   Find the value of $\sqrt{\dfrac{3}{4\cdot2^2 - 3}}$, giving your answer correct to two decimal places.   [2]

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