

**SMART EXAM RESOURCES**  
**SUBJECT: CAMBRIDGE INTERNATIONAL MATH**  
**TOPIC: NUMBERS**  
**SUB-TOPIC: POWERS AND ROOTS**  
**SET-1-QP-MS**

- 1**  
**(a)** Work out  $27^{\frac{2}{3}}$ .

*Answer(a)* ..... [1]

**MARK SCHEME:**

<b>(a)</b>	9	B1	
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2

Work out.

$$164^2 - 36^2$$

*Answer(b)* ..... [1]

**MARK SCHEME:**

| 25 600

| **1** |

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**3**

**(a)** Work out  $(0.3)^2$ .

*Answer(a)* ..... [1]

**MARK SCHEME:**

**(a)** | 0.09

| **1** |

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4

Work out.

(i)  $(\sqrt{2})^6$

..... [1]

(ii)  $\frac{1}{8^{-\frac{1}{3}}}$

..... [2]

**MARK SCHEME:**

(i) 8

(ii) 2

1

2

**M1** for  $8^{\frac{1}{3}}$  or  $\frac{1}{\frac{1}{2}}$  oe

If 0 scored then **SC1** for answer  $\frac{1}{2}$



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**5**

Work out.  
 $(0.6)^2$

..... [1]

**MARK SCHEME:**

0.36	<b>1</b>	
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**6**

Work out  $\sqrt{2\frac{1}{4}}$ .

..... [2]

**MARK SCHEME:**

1.5 oe	2	<b>M1</b> for $\frac{9}{4}$
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7 Find  $\sqrt[3]{0.001}$ .

..... [1]

**MARK SCHEME:**

[0].1 or $\frac{1}{10}$	<b>1</b>	
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8

Work out the value of  $\left(\frac{1}{27}\right)^{-\frac{1}{3}}$ .

..... [1]

**MARK SCHEME:**

3	1
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