

MATHEMATICS

INDICES

Total Marks: 30

Duration: 0 hours, 25 minutes

Instructions to test takers

1. Answer all the questions in this paper
2. All the answers for the questions in this paper will be found on **Study Star** (www.studystar.me)
3. Using the answers on the website, mark yourself truthfully and carefully.

Turn this page, time yourself and begin the test

Section A

1. Express $27^{\frac{1}{3}}$ in root form. [1]

2. Express $64^{\frac{5}{8}}$ in root form. [1]

3. Express $(\sqrt[3]{27})^2$ in index form. [1]

4. Express $\sqrt[7]{54^4}$ in index form. [1]

5. Evaluate $\sqrt[3]{27}^2$ [2]

6. Evaluate $\sqrt[3]{64}^2$ [2]

7. Evaluate $16^{\frac{3}{4}}$ [2]

8. Evaluate $9^{1.5}$ [2]

9. Evaluate $8^{1\frac{1}{3}}$ [2]

10. Evaluate $4^{\frac{5}{2}}$ [2]

Section B

11.	Evaluate $\sqrt{9 \times 4}$	[2]
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12.	Evaluate $27^{\frac{2}{3}} \times 4^{\frac{1}{2}}$	[3]
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13.	Evaluate $16^{\frac{1}{4}} \times 8^{\frac{2}{3}}$	[3]
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14.	Evaluate $9^{1.5} \div 9^{\frac{1}{2}}$	[3]
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15.	Evaluate $25^{1.5} \times 77^0$	[3]
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