

SURDS AND INDICES

Q: 1

If $\sqrt{10}=3.162$ then find the value of $\frac{\sqrt{5}}{\sqrt{2}}$

यदि $\sqrt{10}=3.162$, तो $\frac{\sqrt{5}}{\sqrt{2}}$ का मान ज्ञात कीजिये ।

1. 1.582

2. 6.322

3. 31.62

3. 0.3162

Q: 2 If $\sqrt{2}=1.414$ then find the value of $5\sqrt{8} + 5\sqrt{32} - 5\sqrt{128} + 2\sqrt{50}$
यदि $\sqrt{2}=1.414$, तो $5\sqrt{8} + 5\sqrt{32} - 5\sqrt{128} + 2\sqrt{50}$ का मान ज्ञात कीजिये |

1. 1.414

2. 4.242

3. 7.070

4. 0

Q: 3

If $\sqrt{5}=2.236$ and $\sqrt{10}=3.162$ then find the value of $\frac{15}{\sqrt{10}+\sqrt{20}+\sqrt{40}-\sqrt{5}-\sqrt{80}}$

यदि $\sqrt{5}=2.236$ और $\sqrt{10}=3.162$, तो $\frac{15}{\sqrt{10}+\sqrt{20}+\sqrt{40}-\sqrt{5}-\sqrt{80}}$ का मान ज्ञात कीजिये |

1. 0.926

2. 5.398

3. 26.99

4. NOT

Q: 4

$$\frac{(625)^{6.25} \times (25)^{2.6}}{(625)^{6.75} \times (5)^{1.2}} = ?$$

1. 625

2. 25

3. 5

3. $\sqrt{5}$



Q: 5

$$\frac{5^n \times 5^3 - 6 \times 5^n \times 5}{9 \times 5^n - 5^n \times 2^2} = ?$$

1. 21

2. 29

3. 31

4. 19



Q: 6

$$\left(\frac{1 \times 3 \times 9 + 2 \times 6 \times 18 + 3 \times 9 \times 27 + \dots}{1 \times 5 \times 25 + 2 \times 10 \times 50 + 3 \times 15 \times 75 + \dots} \right)^{\frac{1}{3}} = ?$$

1. 1

2. 0

3. 15

4. NOT



Q: 7

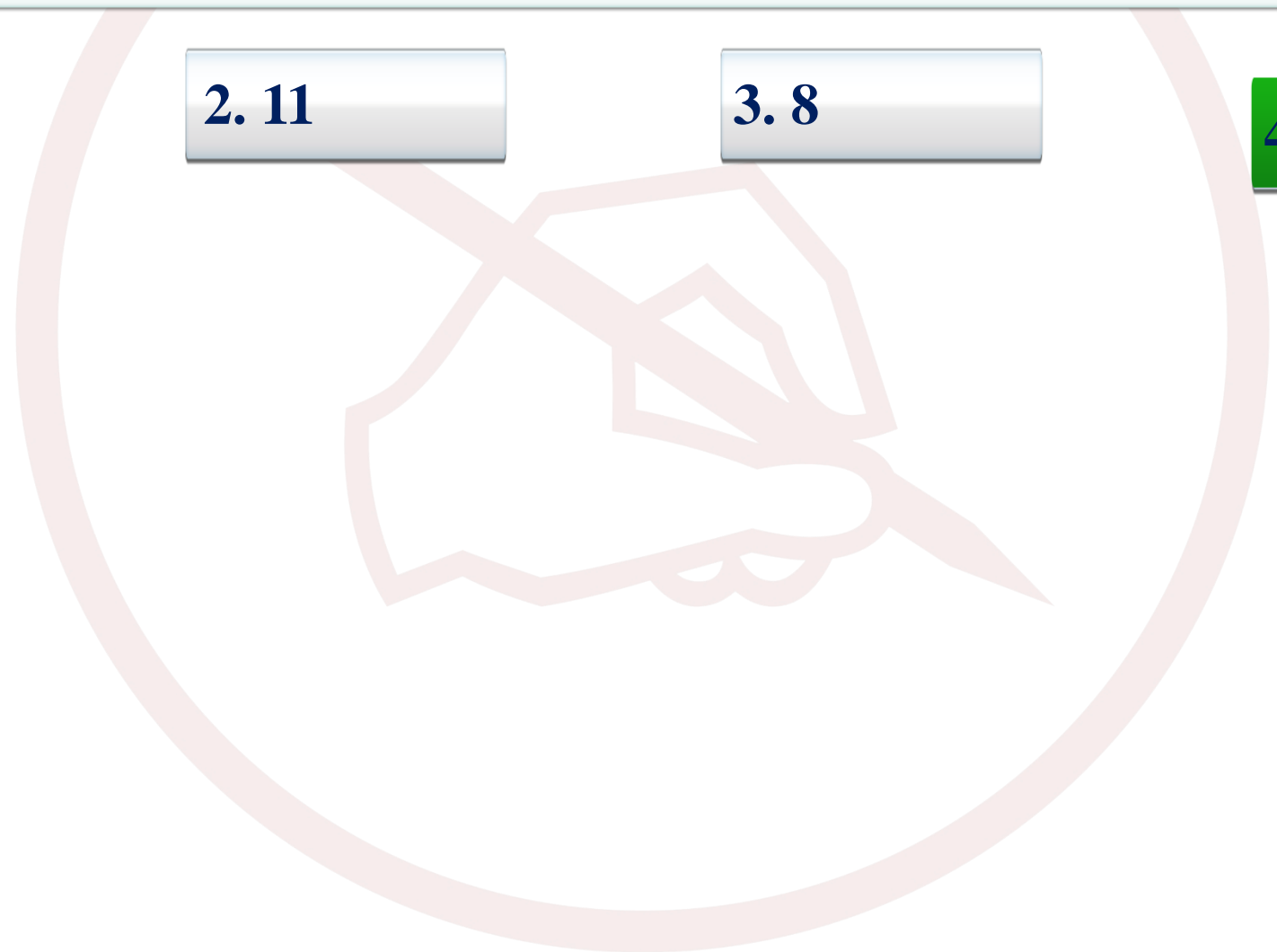
$$\frac{1}{\sqrt{2}+1} + \frac{1}{\sqrt{3}+\sqrt{2}} + \frac{1}{\sqrt{4}+\sqrt{3}} \dots \dots + \frac{1}{\sqrt{100}+\sqrt{99}} =$$

1. 12

2. 11

3. 8

4. 9



Q: 8

If $\left(3^{m^2} \div (3^m)^2\right)^{\frac{1}{m}} = 81$ then the value of m is:

यदि $\left(3^{m^2} \div (3^m)^2\right)^{\frac{1}{m}} = 81$ है तो m का मान है :

1. 1

2. 6

3. 9

4. 3

Q: 9

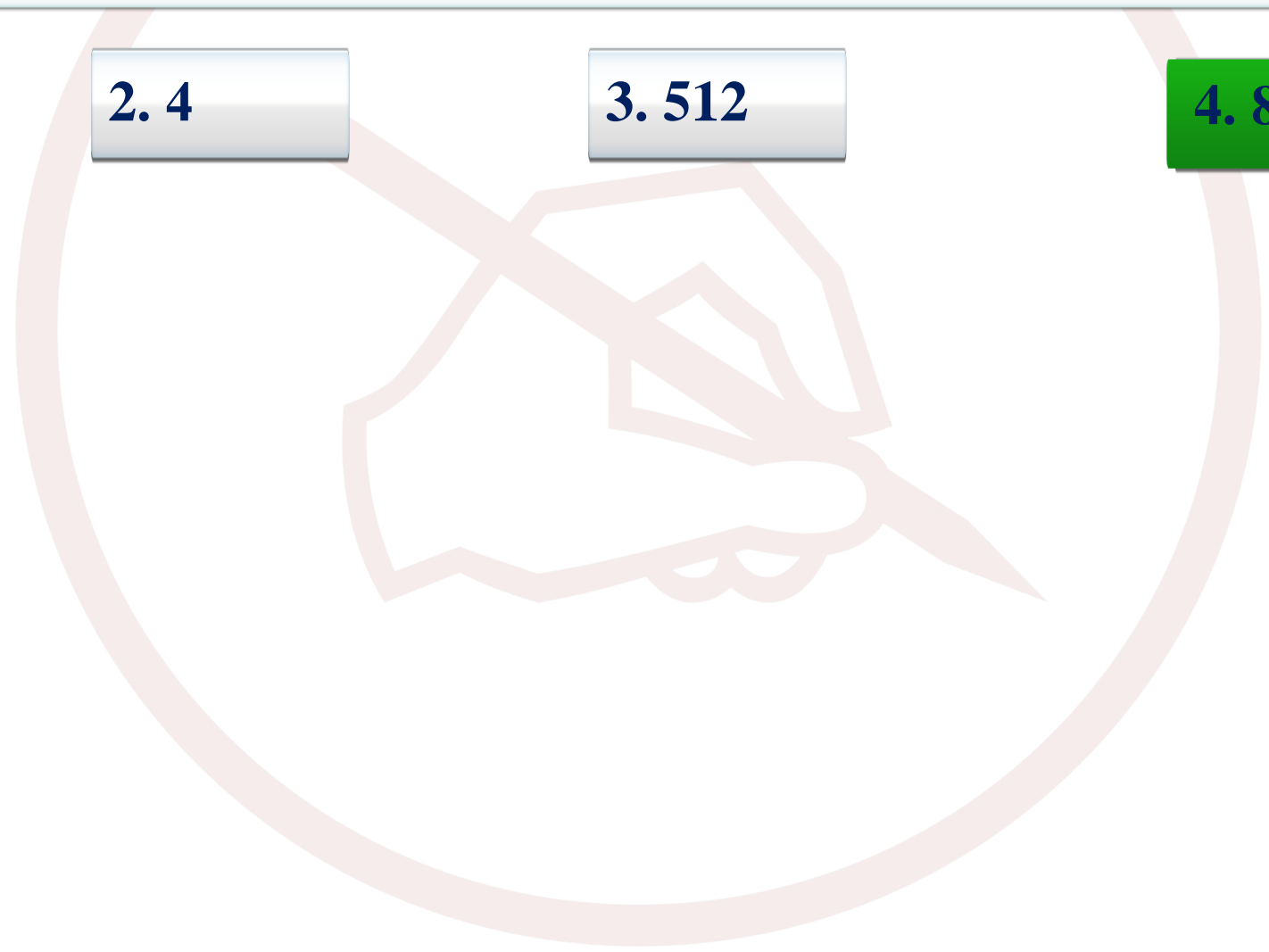
$$\sqrt{8 \sqrt[3]{64 \sqrt{8 \sqrt[3]{64 \dots \dots \infty}}}} =$$

1. 64

2. 4

3. 512

4. 8



Q: 10 If $a = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ and $b = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$ then find the value of $\frac{a^2}{b} + \frac{b^2}{a}$.

यदि $a = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ और $b = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$ हैं, तो $\frac{a^2}{b} + \frac{b^2}{a}$ का मान ज्ञात कीजिये |

1. 1

2. 970

3. 1000

3. 1030