

# Question

Question ID: 873



3. What is the value of  $\sqrt{\frac{1}{2^6} + \frac{1}{6^2}}$ ?

A  $\frac{1}{10}$

B  $\frac{1}{9}$

C  $\frac{1}{3}$

D  $\frac{5}{24}$

E  $\frac{7}{24}$

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## Answer

3. D  $\frac{1}{2^6} + \frac{1}{6^2} = \frac{3^2 + 2^4}{2^6 \times 3^2} = \frac{25}{2^6 \times 3^2} = \frac{5^2}{(2^3 \times 3)^2}$ . Hence the answer is  $\frac{5}{2^3 \times 3} = \frac{5}{24}$ .