

If the shortest distance between the lines

$$\vec{r}_1 = \alpha \hat{i} + 2\hat{j} + 2\hat{k} + \lambda (\hat{i} - 2\hat{j} + 2\hat{k}), \lambda \in R, \alpha > 0$$

and $\vec{r}_2 = -4\hat{i} - \hat{k} + \mu (3\hat{i} - 2\hat{j} - 2\hat{k}), \mu \in R$ is 9, then α is equal to

A

B

C

D

Maths by Vedantu

$\left(4^{\frac{1}{4}} + 5^{\frac{1}{6}}\right)^{120}$ total number of integral terms is ____

A

B 11

C

D

Maths by Vedantu - Answer B

Find the coefficient of x^{256} in $[1 - x]^{101} \times (x^2 + x + 1)^{100}$

Maths by Vedantu - Answer A

- A** ${}^{100}C_{15}$
- B** ${}^{-100}C_{15}$
- C** ${}^{100}C_{18}$
- D** ${}^{-100}C_{16}$

Tangent and normal are drawn to $y^2 = 2x$ at $A(2, 2)$. Tangent cuts x-axis at T and normal cuts parabola again at p. Find area of ΔATP .

- A** $\frac{25}{2}$
- B** 25
- C**
- D**

Maths by Vedantu - Answer A