



If A is a square matrix of order 4 and $|A| = 2$, then $\frac{1}{2} \text{adj} (5A)$ equals :

Solution:

$$\begin{aligned} \frac{1}{2} \text{adj} (5A) &= \frac{1}{|A|} 5^3 \text{adj}(A) & \frac{1}{|A|} \text{adj} (A) &= A^{-1} \\ &= 5^3 A^{-1} \\ &= 125 A^{-1} \end{aligned}$$

A

$$A^{-1}$$

B

$$125 A^{-1}$$

C

$$50 I$$

D

$$\frac{5}{2} A^{-1}$$