Related Questions with Solutions

Questions

Quetion: 01

If $y = \dfrac{(a-x)\sqrt{a-x} - (b-x)\sqrt{x-b}}{\sqrt{a-x} + \sqrt{x-b}}$ then $\dfrac{dy}{dx}$ wherever it is defined is equal to:

A. $\dfrac{x + (a+b)}{\sqrt{(a-x)(x-b)}}$

B. $\dfrac{2x - (a+b)}{2\sqrt{(a-x)(x-b)}}$

C. $-\dfrac{(a+b)}{2\sqrt{(a-x)(x-b)}}$

D. $\dfrac{2x + (a+b)}{2\sqrt{(a-x)(x-b)}}$

Solutions

Solution: 01

Read $N^r = (\sqrt{a-x})^3 + (\sqrt{x-b})^3$ and factorise.

Correct Options

Answer:01

Correct Options: B