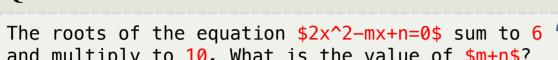
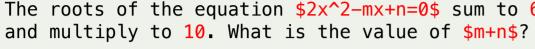
Original CoT Reasoning Process

Question





Thinking + Responses

Deepseek-R1-Distilled-Qwen-7B

Okay, so I have this equation here: $(2x^2 - mx + n = 0)$. They told me that the sum of the roots is 6 and the product is 10. Hmm, I need to find (m + n). Alright, let's see how to approach this.

First off, I remember something called Vieta's formulas from algebra class.

<Omitted>

Sum of roots = (-b/a = -(-m)/2 = m/2). Product of roots = (c/a = n/2)

But wait, in the problem statement, they say the sum of the roots is 6 and the product is 10. So that gives us two equations: 1) Sum: (m/2 = 6)

2)2) Product: (n/2 = 10)

<Omitted>

the value is \(\boxed{32}\).

More than 600 tokens 😂

Hawkeye: Instruction Reasoning Process

Hawkeye Thinking

Deepseek-R1-Distilled-Qwen-7B-Hawkeye (LLM)

The quadratic equation $(2x^2 - mx + n = 0)$ has roots that sum to $(\frac{m}{2})$ and multiply to $(\frac{n}{2})$. Given that these sums and products equal (6) and (10), respectively: $[\frac{m}{2} = 6 \quad Right]$ arrow \quad m = 12\] \[\frac{n}{2} = 10 \quad \Rightarrow \quad n = 20\] Adding these values together gives: [m + n = 32], $[boxed{32}]$

Hawkeye Instruction

Only 72 tokens ⁽²⁾

Owen2.5-0.5B (SLM)

Hawkeye Expansion

The given solution correctly identifies the values of $\(m\)$ and $\(n\)$ from the equations derived from the properties of the roots of a quadratic equation. <Omitted> Based on the reasoning provided: 1. The roots of the quadratic equation $(2x^2 - mx + n = 0)$ are given by the sum and product of the roots: $\ \langle x \ 1 + x \ 2 = \frac{-b}{a} = \frac{m}{2} \ \rangle \ \langle x \ 1 \ \rangle$ = $\frac{c}{a} = \frac{n}{2}$. 2. We know from the problem statement that: $[x 1 + x 2 = 6 \in \frac{m}{2} = 6 \in m = 12]$ Also, since $(x_1 \cdot x_2 = 10): (frac_n)_{2} = 10 \in n = 20$] 3. Therefore, we have: [m + n = 12 + 20 = 32]So, the value of (m + n) is $(boxed{32})$.