This is a great title
This is an even greater subtitle

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Here I show a very basic example of how to use the `problem` environment I defined using the `\tcolorbox` package.
Your titleproblem-label This is an example problem taken from [**?**]:
[(a)]Prove the following[label = ()]

$\langle p'|x|\alpha\rangle = \hbar p'\langle p'|\alpha\rangle.$
$\langle\beta|x|\alpha\rangle = \int p'\phi_\beta^*(p')\hbar p'\phi_\alpha(p'),$
where $\phi_\alpha(p') = \langle p'|\alpha\rangle$ and $\phi_\beta(p') = \langle p'|\beta\rangle$ are momentum-space wave functions.
What is the physical significance of

where x is the position operator and Ξ is some number with the dimension of momentum? Justify your answer.
Notice that the partial derivative and integral are smaller when used in a sentence compared with when you're worl
Your titleproblem-label-2 This is an example problem taken from [**?**]:
[(a)]Prove the following[label = ()]

$\langle p'|x|\alpha\rangle = \hbar p'\langle p'|\alpha\rangle.$

$$\langle\beta|x|\alpha\rangle = \int p'\phi_\beta^*(p')\hbar p'\phi_\alpha(p'),$$

where $\phi_\alpha(p') = \langle p'|\alpha\rangle$ and $\phi_\beta(p') = \langle p'|\beta\rangle$ are momentum-space wave functions.
$\cdots$
I use the package `physics` which provides a great variety of commands for common operations and symbols. For in