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Solution Manual for Quantum Mechanics 1st Edition McIntyre 0321765796 9780321765796

Full link
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Solution
Manual:

<https://testbankpack.com/p/solution-manual-for-quantum-mechanics-1st-edition-mcintyre-0321765796-9780321765796/>

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$$\psi(x) = \frac{1}{\sqrt{2a}} \left[e^{-\kappa x} - e^{-\kappa(2a-x)} \right] \quad 0 \leq x \leq 2a$$

$$\psi(x) = \frac{1}{\sqrt{2a}} e^{-\kappa x} \quad x > 2a$$

$$\psi(x) = \frac{1}{\sqrt{2a}} e^{\kappa x} \quad x < 0$$

$$\psi(x) = \frac{1}{\sqrt{2a}} \left[e^{-\kappa x} - e^{-\kappa(2a-x)} \right] \quad 0 \leq x \leq 2a$$

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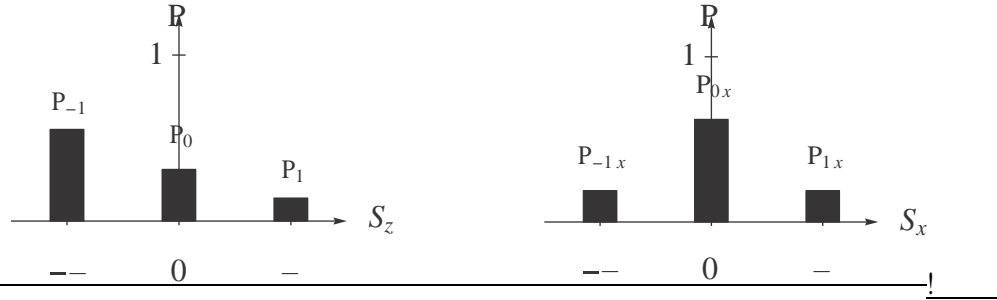
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$$= \left| \frac{1}{\sqrt{2}} (1 + 0) \right|^2 = \left| \frac{1}{\sqrt{2}} \right|^2 = \frac{1}{2}$$

$$P_0 = \left| \langle \uparrow | \downarrow \rangle \right|^2 = \left| \langle \uparrow | \frac{1}{\sqrt{2}} (|\uparrow\rangle - |\downarrow\rangle) \rangle \right|^2 = \left| \frac{1}{\sqrt{2}} \langle \uparrow | \uparrow \rangle - \frac{1}{\sqrt{2}} \langle \uparrow | \downarrow \rangle \right|^2$$

$$= \left| \frac{1}{\sqrt{2}} (1 - 0) \right|^2 = \left| \frac{1}{\sqrt{2}} \right|^2 = \frac{1}{2}$$

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$$= \left| \frac{1}{2} (1 + 0 + 1 - 0) \right|^2 = \left| \frac{1}{2} (2) \right|^2 = 1$$

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$$= \left| \frac{1}{2} (1 + 0 + 1 - 0) \right|^2 = \left| \frac{1}{2} (2) \right|^2 = 1$$

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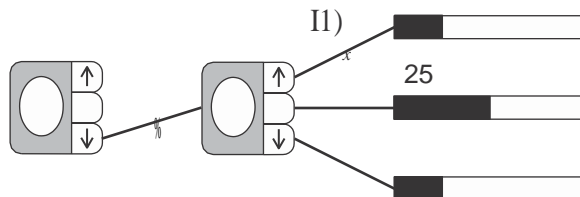
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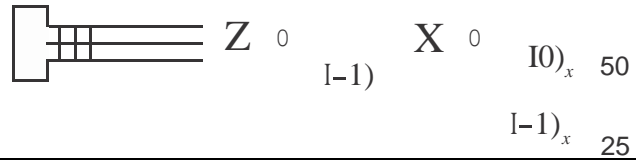
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