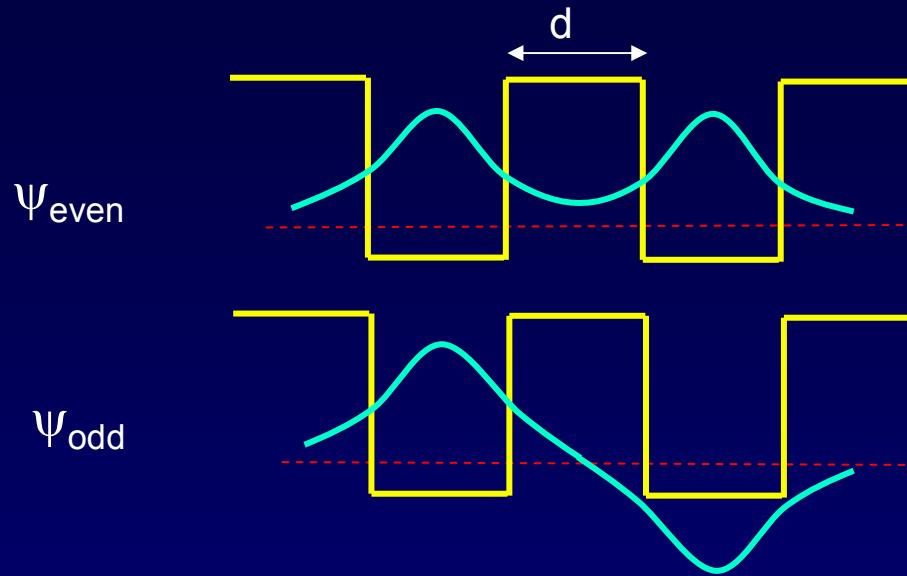


Solution



What will happen to the energy of Ψ_{even} as the two wells come together (i.e., as d is reduced)? [Hint: think of the limit as $d \rightarrow 0$]

- a. E_{even} decreases.
- b. E_{even} stays the same.
- c. E_{even} increases.

As the two wells come together, the barrier disappears, and the wave function spreads out over a single double-width well. Therefore the energy goes down (by a factor of ~ 4).

