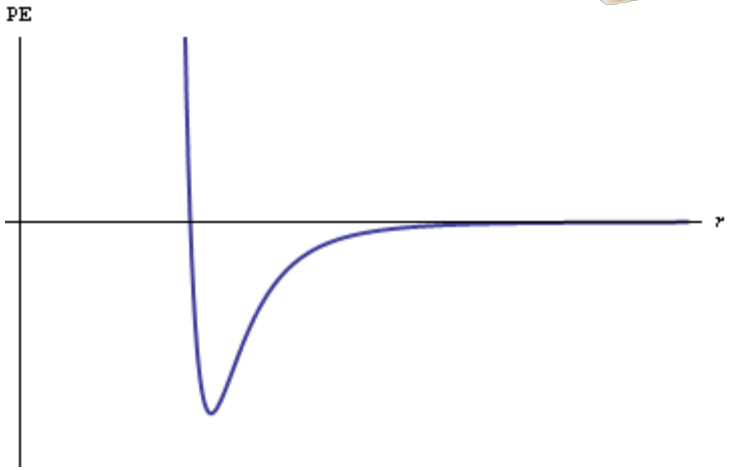
You know that two atoms that are far apart are barely interacting.

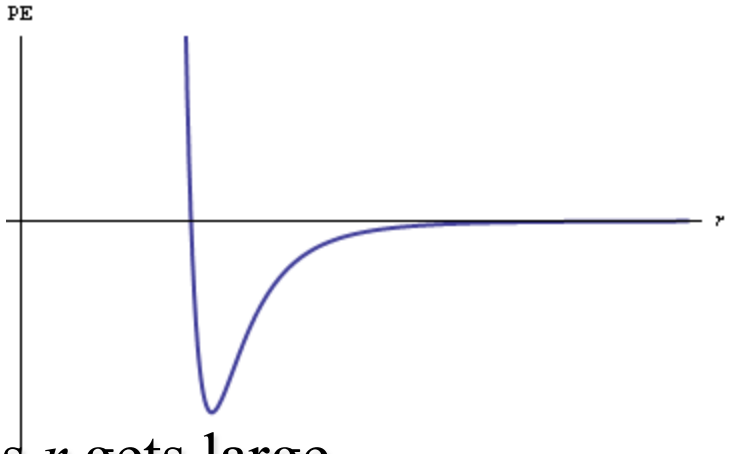
How is this represented visually in the PE diagram?



1. The potential energy approaches zero as *r* gets large.
2. The PE curve is close to horizontal as *r* gets large.
3. The PE curve is close to vertical as *r* gets small.
4. The potential energy has a minimum.
5. More than one of these
6. The PE diagram doesn't demonstrate this information
7. None of these

These two atoms can exist in a stable bound state.

How is this represented visually in the PE diagram?



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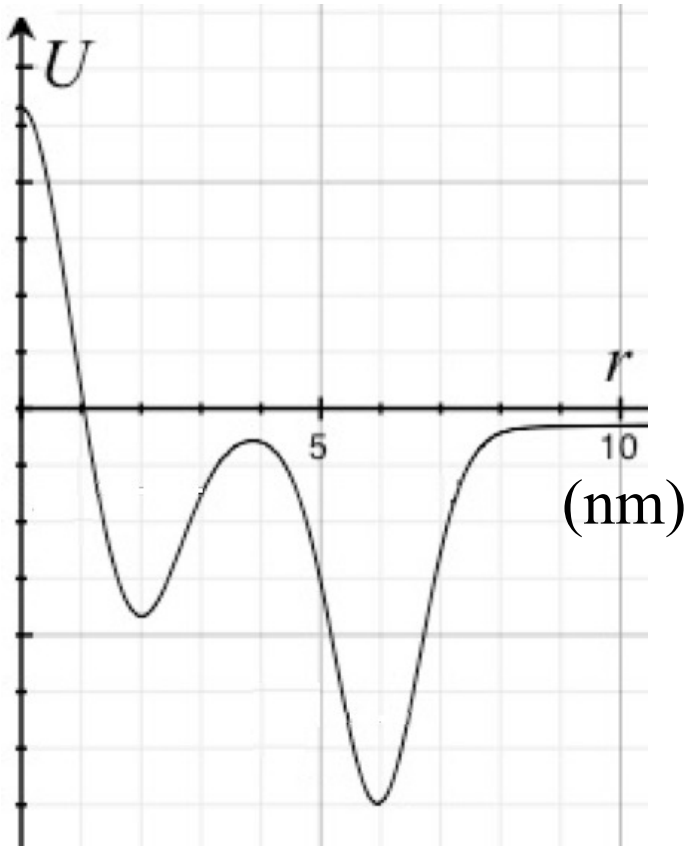
The figure below shows the interaction potential between two molecules (along a particular orientation of the two molecules). The units are in nm (r) and eV (*U*).

When the molecules are separated by 7 nm the force between them is

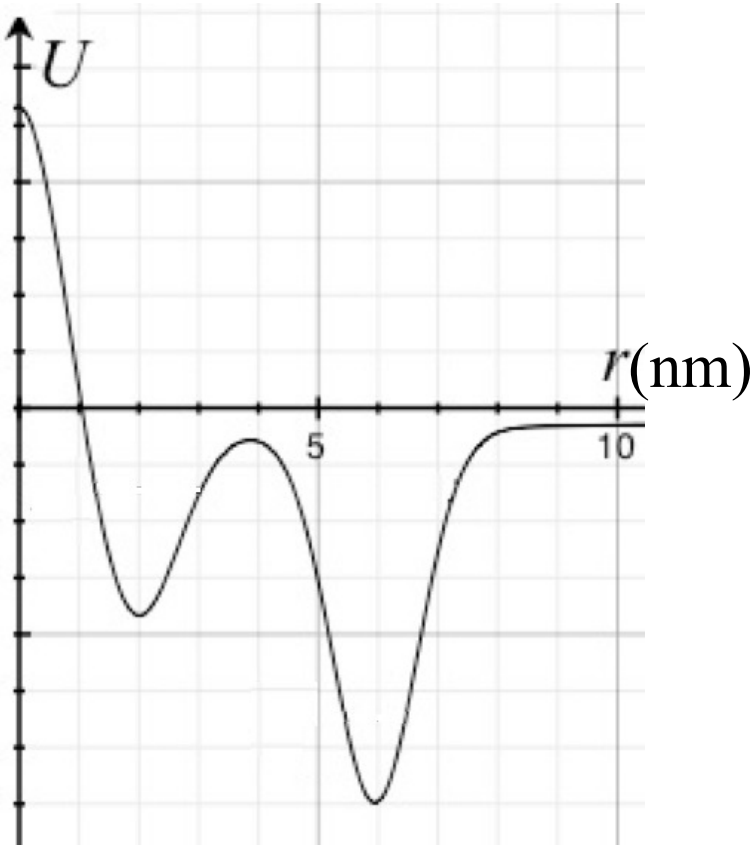
1. Attractive
2. Repulsive
3. Zero
4. Cannot be determined from the figure.



The figure below shows the interaction potential between two molecules (along a particular orientation of the two molecules). The units are in nm (r) and eV (*U*).

When the molecules are separated by 2 nm the force between them is

1. Attractive
2. Repulsive
3. Zero
4. Cannot be determined from the figure.



The figure below shows the interaction potential between two molecules (along a particular orientation of the two molecules). The units are in nm (r) and eV (*U*).

When the molecules are separated by 0.5 nm the force between them is

1. Attractive
2. Repulsive
3. Zero
4. Cannot be determined from the figure.