

Problem 1, Chemistry 301X - 2006

When we made  $\text{H}_2$  in lecture, we combined two  $1s$  orbitals of the same sign to produce the bonding and antibonding molecular orbitals.

I was asked after class what would happen if we had started the “orbital smushing” with  $1s$  orbitals of different sign. That’s a good question - please work out the answer.

