Thermochemistry

Wake Up: Bond Enthalpies

$$2\ H_2O_2(l) \rightarrow 2\ H_2O(l) + O_2(g)$$

Bond	Average Bond Enthalpy (kJ/mol)
$O-H$	463
$O-O$	146
$O{=}O$	495

1. Shown above is the chemical equation for the decomposition of hydrogen peroxide and a table of bond enthalpies. On the basis of this information, which of the following is the enthalpy of decomposition of two moles of hydrogen peroxide?

   (a) -349 kJ

   (b) -203 kJ

   (c) +203 kJ

   (d) +349 kJ