

DEPARTMENT OF CHEMISTRY
UNIVERSITY OF PENNSYLVANIA
MCE PROGRAM

CHEMISTRY 503, 2006/7

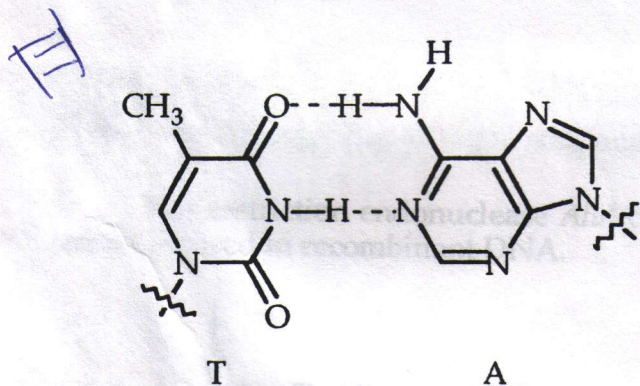
WORKSHOP PROBLEMS

March 31st

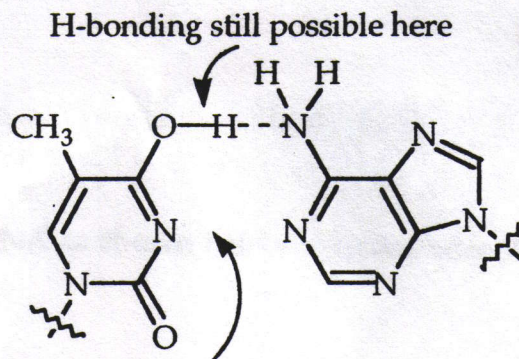
ANSWERS

Dr. Roberts

3. If thymine existed predominantly in the tautomeric form in which the carbonyl group at C4 is enolized (see Table 26.1, p741, in MC for the numbering of the ring), explain with the aid of appropriate structures how this would disrupt the AT base pair.



the AT base pair



the AT base pair if the C4 carbonyl group of T is enolized