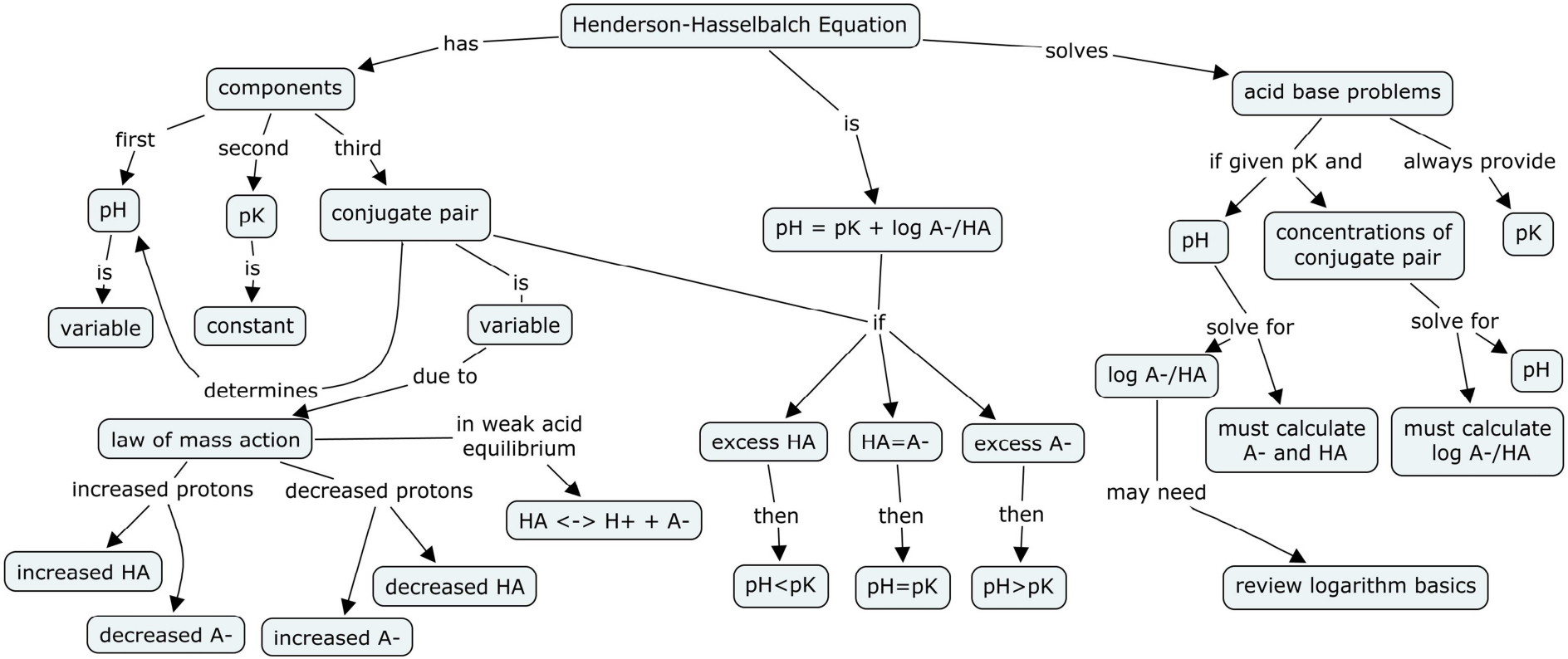
Henderson-Hasselbalch Equation
has
solves
is
components
first
second
third
pH
is
variable
pK
is
constant
conjugate pair
is
variable
determines
due to
law of mass action
in weak acid equilibrium
HA <-> H+ + A-
increased protons
decreased protons
increased HA
decreased A-
decreased HA
increased A-
pH = pK + log A-/HA
if
excess HA
HA=A-
excess A-
then
then
then
pH<pK
pH=pK
pH>pK
acid base problems
if given pK and
always provide
pH
concentrations of conjugate pair
pK
solve for
solve for
log A-/HA
pH
must calculate A- and HA
must calculate log A-/HA
may need
review logarithm basics