I. Factor “$x^2 + bx + c$” (p.351):

1. $(x + p)(x + q) = x^2 + xq + px + pq$
   
   $= x^2 + qx + px + pq$
   
   $= x^2 + px + qx + pq$
   
   $= x^2 + (p+q)x + pq$
   
   *i.e.*, find two numbers “$p$” & “$q$” such that...

   
   $x^2 + bx + c = x^2 + (p+q)x + pq$
   
   need $pq = c$ and $p + q = b$

2. Examples (p.361): Exercises #8,18,22,32,36

II. Factor “$x^{2n} + bx^n + c$” (p.356):

1. “$u$”-substitution, let $x^n = u$ then $u^2 = _____$

   and...

   $x^{2n} + bx^n + c = u^2 + bu + c$

   same criteria for $p$ & $q$ (*i.e.*, need $pq = c$ & $p + q = b)

   as then...

   $(u + p)(u + q) = x^{2n} + bx^n + c$

2. Examples (p.361): Exercises #40,42
HW: p.361 / Exercises #3, 7, 11, 15, 19, 21, 31-41 (odd)
Re-read pp.356-360 (section 5.4 ~ ax² + bx + c)