ATH 5   WORKSHEET :   Functions & Periods   3/28/07.
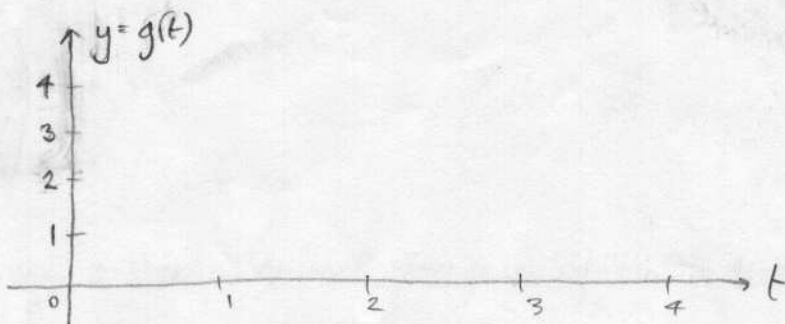   Barnett

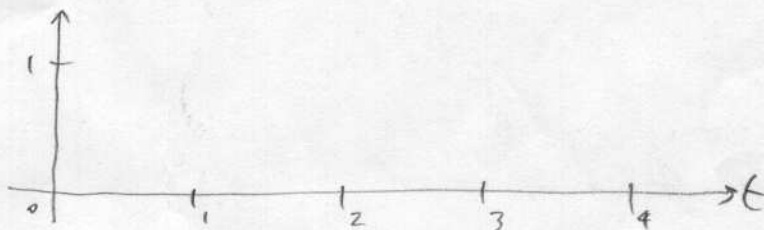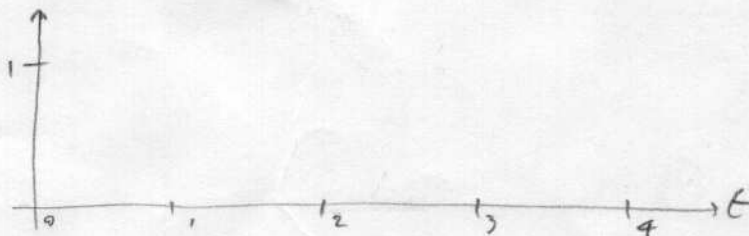Sketch the following functions &   give their periods or state nonperiodic

$g(t) = t^2$

period = ?

$g(t) = "\,frac(t)\,"$

this means, the
fractional part
of t, ie
$t - floor(t)$

period =

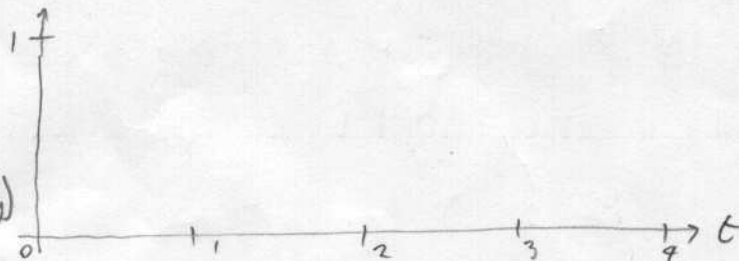$g(t) = frac(3t)$

period =

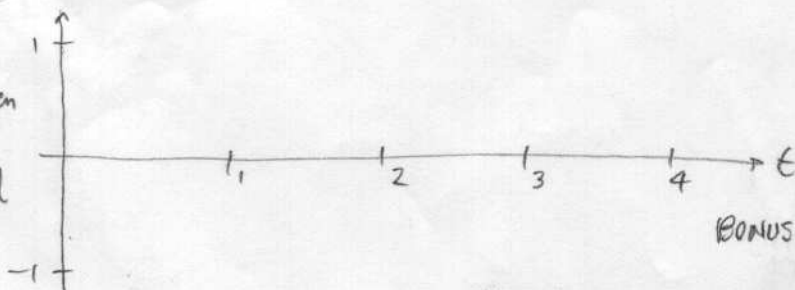$g(t) = 2^{-t}$

(plot for integer t
then join up smoothly)

period =

$(t) = \begin{cases} +1, & \text{if floor}(t) \text{ even} \\ -1, & \text{if floor}(t) \text{ odd} \end{cases}$

period =

BONUS: What if change 'even'
to 'prime' and 'odd'
to 'not prime' ?