

**The tests are **not** graded.**

**Hopefully, the grades will be in  
Pinnacle before Sunday a.m.**

Sequences ... Review

sequence a list of  
numbers

addition

(arithmetic)

$t_n$ :  <sup>$t_1$</sup>  2,  <sup>$t_2$</sup>  5,  <sup>$t_3$</sup>  8,  <sup>$t_4$</sup>  11,  <sup>$t_5$</sup>  14, ... range

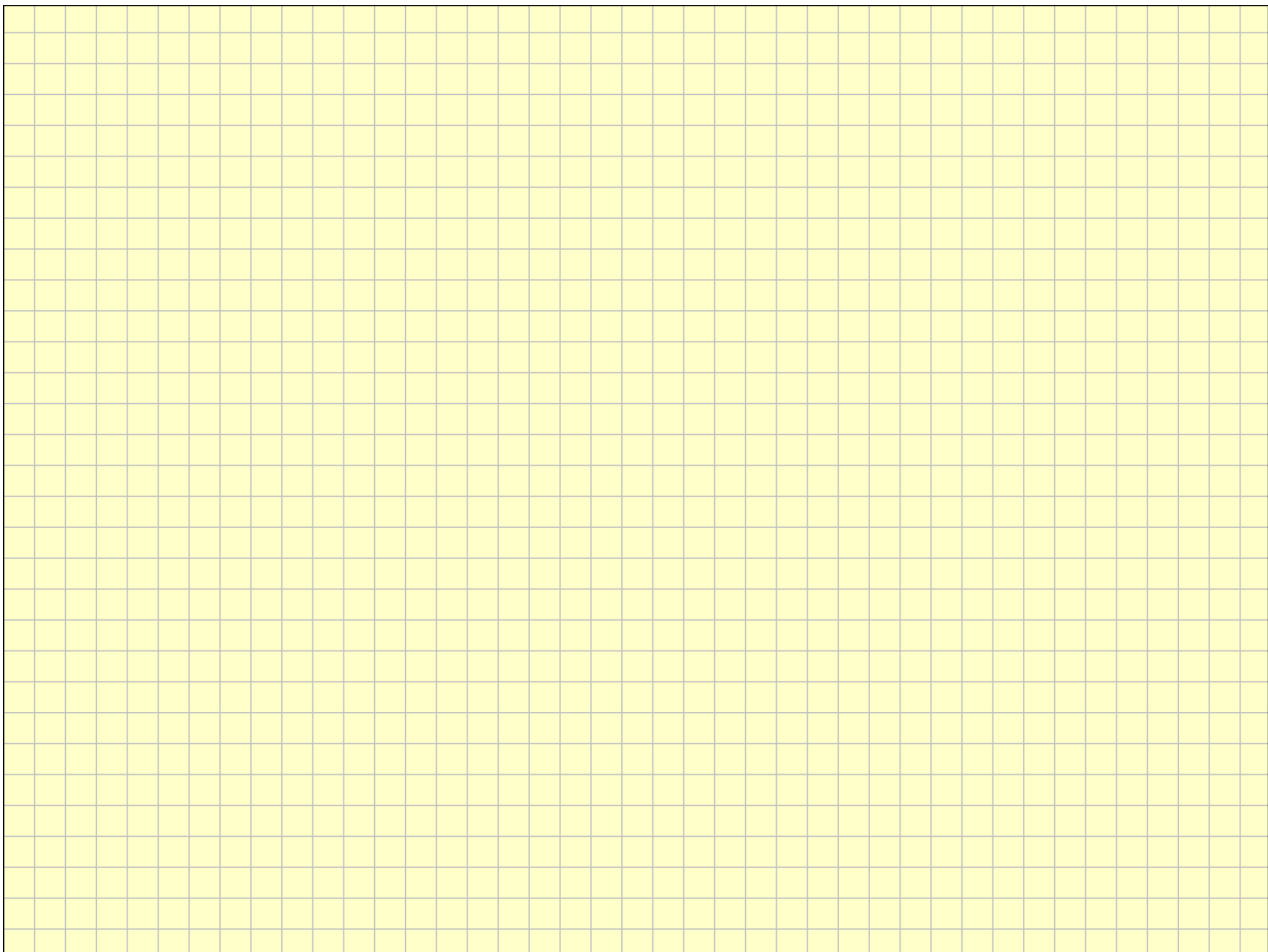
$n$ : 1, 2, 3, 4, 5, ... domain

explicit :  $t_n = t_1 + 3(n-1)$   
(closed)

$$t_n = t_1 + \textcircled{d}(n-1)$$

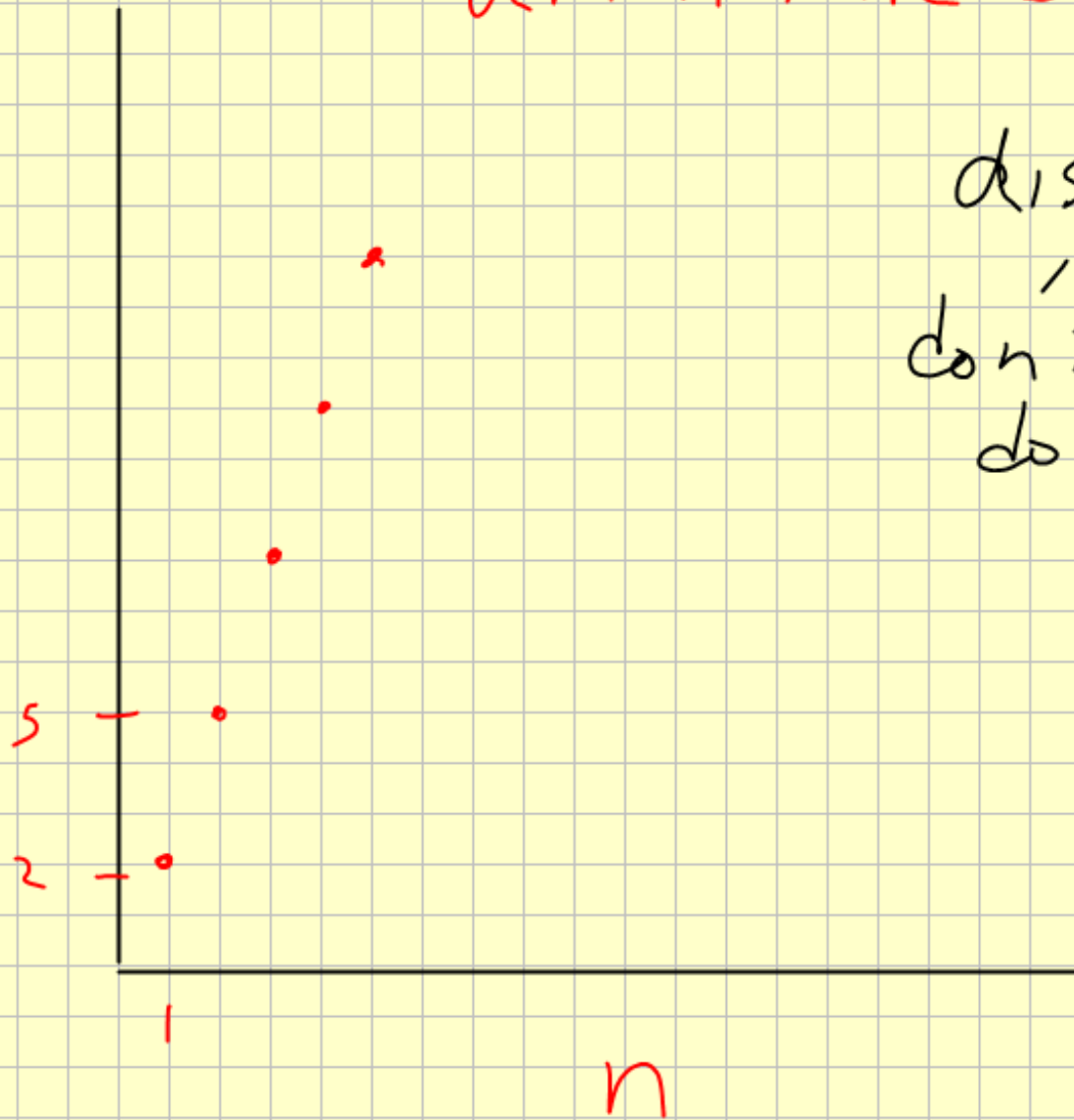
common dif.

recursive :  $t_n = t_{n-1} + 3$   
 $t_n = t_{n-1} + d$



# arithmetic seq.

$t_n$



discrete —  
don't connect  
dots

# Multiplication (geometric)

$$y = 3^t$$

$$\frac{6}{2} \Rightarrow \frac{18}{6} \Rightarrow \frac{54}{18} = 3$$

exponential fn  
 $y = r^x$

$$t_n : 2, 6, 18, 54, 162, 486, \dots$$

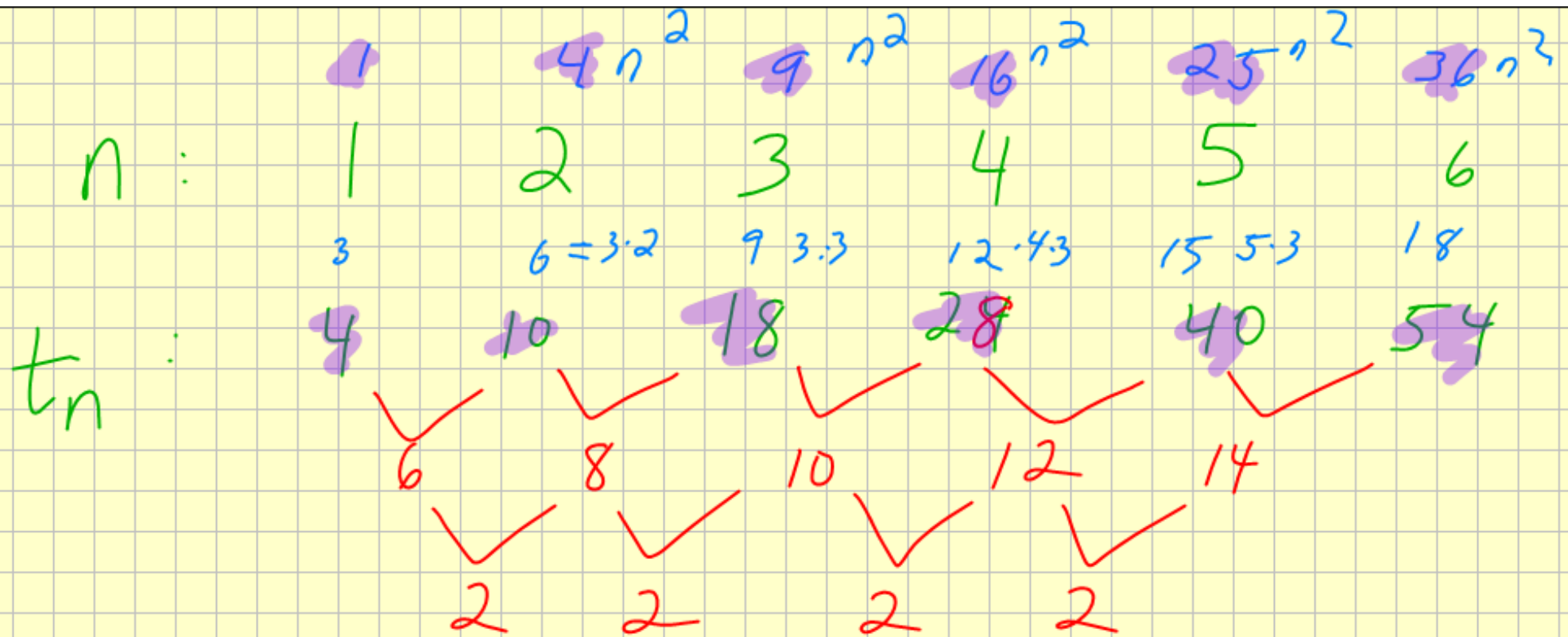
$$n : 1, 2, 3, 4, 5, 6$$

explicit:  $t_n = 2 \cdot 3^{(n-1)}$

$$t_n = t_1 \cdot r^{(n-1)}$$

recursive form:  $t_n = 3 \cdot t_{n-1}$

$$t_n = r t_{n-1}$$



$$t_n = n^2 + 3n$$

$$t_n = n(n + 3)$$

HW p. 645

#1-13 (odd)

#17