

## 3.2 Discrete Math

Review Exercise pg 144 # 1-9 all

Exercise pg 145 # 1-49 eoo (1, 5, 9, ...)

REVIEW Exercises - See BACK of Book

(1)  $s_1 = 0$

(5)  $t_7 = 2 \cdot 7 - 1 = 13$

(9)  $\sum_{i=3}^7 t_i = t_3 + t_4 + t_5 + t_6 + t_7$   
 $= 5 + 7 + 9 + 11 + 13 = 45$

(13)  $t$  is increasing

(17)  $v_3 = 3! + 2 = 3 \cdot 2 + 2 = 8$

(21)  $v$  is increasing

(25)  $\sum_{i=2}^4 g_i = g_2 + g_3 + g_4 = 12 + 12 + 28 = 52$

(29) NO!  $g$  is increasing  
 $\therefore g$  is NOT non increasing

(33)  $\tau$  is NON INCREASING

(37) Yes  $\gamma$  is non increasing

(41)  $\sum_{i=4}^4 a_i = 4^2 - 3 \cdot 4 + 3 = 16 - 12 + 3 = 7$

(45)  $\prod_{n=2}^3 a_n = (2^2 - 3 \cdot 2 + 3)(3^2 - 3 \cdot 3 + 3) = (4 - 6 + 3)(3) = 3$

(49)  $a_1 = 1$   $a_2 = 4 - 6 + 3 = 1$   $a_3 = 4 - 6 + 3 = 1$   $a_4 = 3$   $a_5 = 7$   $a_6 = 13$   
NO  $a$  is NOT non increasing