Pag 140

27.04.21

(15) $S_{10} = \frac{(a_1 + a_{10}) \cdot n}{2}$ //

$S_{10} = \frac{(a_1 + a_{10}) \cdot 10}{2} = \frac{(3 + 39) \cdot 10}{2} = \frac{420}{2} = 210$

Pag 140

(16) $a_n = 10 - 5n$

$a_1 = 10 - 5 \cdot 1 = 5 \;//\; a_1 = 5$

$a_{25} = 10 - 5 \cdot 25 = 10 - 125 = -115$

$$S_{25} = \frac{(a_1 + a_{25}) \cdot 25}{2} = \frac{(5 - 115) \cdot 25}{2} = -1.375$$

(17) 3, 6, 9, 12 ----

$$S_n = a_1 \cdot n + \frac{(n-1) \cdot d \cdot n}{2}$$

$$S_7 = 3 \cdot 7 + \frac{6 \cdot 3 \cdot 7}{2} = 21 + 63 = 84 \text{ macetas}$$

Pag 127

(54) a) vacas 48 — 72 ↑ inversa

semanas 18 — x ↓

$48 \cdot 18 = 72 \cdot x \;//\; x = \frac{48 \cdot 18}{72} = 12$ semanas

5) Si han pasado 7 semanas, quedará hierba para 11 semanas con las 48 vacas iniciales

vacas 48 — 66 ↑ Inversa

semanas 11 — x ↓

$48 \cdot 11 = 66 \cdot x \;//\; x = \frac{48 \cdot 11}{66} = 8$ semanas

Pag 127

(59) $\frac{120}{4+6+6+8} = \frac{x}{4} = \frac{y}{6} = \frac{t}{6} = \frac{a}{8}$

$\frac{120}{24} = \frac{x}{4}$ // $x = \frac{4 \cdot 120}{24} = \underline{\underline{20}}$

$\frac{120}{24} = \frac{y}{6}$ // $y = \frac{120 \cdot 6}{24} = \underline{\underline{30}}$

$t = y = \underline{\underline{30}}$

$\frac{120}{24} = \frac{a}{8}$ // $a = \frac{120 \cdot 8}{24} = \underline{\underline{40}}$

Pag 148

(39) a) $a_n = 2^n$ // $a_1 = 2^1 = 2$

$a_2 = 2^2 = 4$

$a_3 = 2^3 = 8$

$a_4 = 2^4 = 16$

$a_5 = 2^5 = 32$

b) $a_n = (-3)^{n+2}$ // $a_1 = (-3)^3 = -27$

$a_2 = (-3)^4 = 81$

$a_3 = (-3)^5 = -243$

$a_4 = (-3)^6 = 729$

$a_5 = (-3)^7 = -2.187$

24 Pag 148

40 b) $a_1 = 2 \;/\; a_2 = 1 \;/\; a_3 = \frac{1}{2} \;/\; a_4 = \frac{1}{4} \;/\; a_5 = \frac{1}{8}$

40 c) 3, 4, 7, 11, 18

Pag 149

24 45 a) $d = -3$ // $a_n = a_1 + (n-1) \cdot d = 10 + (n-1) \cdot -3 =$

$= 10 - 3n + 3 = 13 - 3n$

$a_n = 13 - 3n$

Pag 150

24

(61) $a_n = 4 \cdot n + 1$ #

$a_{25} = 4 \cdot 25 + 1 = 101$

$a_1 = 4 \cdot 1 + 1 = 5$

$a_{20} = 4 \cdot 20 + 1 = 81$

$$S_n = \frac{(a_1 + a_n) \cdot n}{2}$$

$$S_{20} = \frac{(5 + 81) \cdot 20}{2} = \underline{\underline{860}}$$