

1ste Nulke HÜ am 18.09.22

Bsp's 1.8a), 1.9ad), 1.10ad), 1.11b)

1.8a)

$$(a_n) = 3 \cdot 2^n$$

$$\langle 6, 12, 24, 48, 96, \dots \rangle$$

$$(n) = \langle 1, 2, 3, 4, 5, \dots \rangle$$

1.8c) 
$$a_n = 1 - \sin(n \cdot \pi)$$

$$(a_n) = \langle 0, 94519, 0, 89, 0, 8362, 0, 782, 0, 729, \dots \rangle$$

1.9a) 
$$\langle 2, 7, 12, 17, 22, 27, \dots \rangle$$

$$a_1 = 2$$

$$(a_{n+1}) = a_n + 5$$

d) 
$$\langle \frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{16}, \frac{1}{32}, \dots \rangle$$

$$(a_n) = \frac{1}{2^n}$$

$$(a_{n+1}) = \frac{a_n}{2}$$

1.10a) 
$$\langle 1, 3, 5, 7, 9, 11, \dots \rangle$$

$$2 \cdot 2 - 1, 2 \cdot 2 - 1, \dots$$

}

$$(a_n) = 2n - 1$$

d) 
$$\langle \frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5}, \frac{5}{6}, \dots \rangle = (a_n)$$

$$(a_n) = \frac{n}{n+1}$$



1.11b)

Stevan Vlagić

$$\cancel{a_n = a_{n-1}}$$

$$a_n = a_{n-1} + 3a_{n-2}$$

$$a_1 = 5$$

$$a_2 = 1$$

$$\cancel{\langle a_n \rangle = \langle 5, 1 \rangle}$$

$$a_n = a_{n-1} + 3a_{n-2}$$

$$\cancel{a_0 = a_{-1} + 3a_{-2}}$$

$$a_1 = a_0 + 3a_{-1} = 5$$

$$a_2 = a_1 + 3a_0 = 1$$

$$a_3 = a_2 + 3a_1 = 16$$

$$a_4 = a_3 + 3a_2 = 19$$

$$a_5 = a_4 + 3 \cdot a_3 = 19 + 3 \cdot 16$$

$$\langle a_n \rangle = \langle 5, 1, 16, 19, 67 \rangle$$