

Antwoorden - Oefenmateriaal - V5 wisC

H9: Rijen en Reeksen

1a	Recursief: $u_n = u_{n-1} + 3$ met $u_0 = 48$ Direct: $u_n = 48 + 3n$
1b	Recursief: $u_n = \frac{1}{2}u_{n-1}$ met $u_0 = 20$ Direct: $u_n = 20 \cdot (\frac{1}{2})^n$
2	1 jan. 2020
3a	323
3b	11,90
4	a=6
5a	72
5b	45
6a	2822
6b	689
7a	$3,5n^2 + 4,5n + 1$
7b	$n \geq 17$
8	$2n^2 + 14n + 12$
9	$1,5n^2 + 1,5n$
10a	3594,97
10b	2614,31
10c	13805,76

11a	*
11b	$n \geq 19$
12a	*
12b	$n \geq 8$
13	17, 56, 185, 611, 2018, 6665, 22013
14	9, 34, 115, 1271, 14496, 1629937, 211763953
15a	$u_n = 11,3 \text{ mjd} \cdot 1,074^n$
15b	233,58 mjd
16a	1,1 cm
16b	21,6 cm
16c	41,2 cm
17	a=4,9 b=9,8 c = 4,9
18a	268
18b	3060

H10: Kansverdelingen

1a	$\frac{1291}{1296}$														
1b	$\frac{427}{432}$														
2a	0,370														
2b	0,048														
2c	0,173														
3a	0,328														
3b	0,738														
3c	0,336														
4	22 t/m 28														
5a	0,197														
5b	0,017														
5c	0,046														
6a	<table><tr><td>x</td><td>1</td><td>2</td><td>3</td><td>4</td></tr><tr><td>$P(X = x)$</td><td>$\frac{4}{7}$</td><td>$\frac{2}{7}$</td><td>$\frac{4}{35}$</td><td>$\frac{1}{35}$</td></tr></table>	x	1	2	3	4	$P(X = x)$	$\frac{4}{7}$	$\frac{2}{7}$	$\frac{4}{35}$	$\frac{1}{35}$				
x	1	2	3	4											
$P(X = x)$	$\frac{4}{7}$	$\frac{2}{7}$	$\frac{4}{35}$	$\frac{1}{35}$											
6b	$E(X) = 1,6 \mid \sigma_X = 0,8$														

7a	0,246
7b	0,081
8a	0,576
8b	0,998
9a	0,085
9b	0,002
10	140
11a	68%
11b	95%
12a	0,0002
12b	0,040
12c	0,002
12d	0,012

H11: Allerlei functies

1a	$x = -3 \vee x = 3$
1b	$x = 0 \vee x = 1$
1c	$x = 8,5$
1d	$x = 29$
1e	$x = 11$
1f	$x = -1 \vee x = 4$
1g	$x = 5$
1h	$x = \frac{3}{4}$
2a	$D_f = \langle \leftarrow, \rightarrow \rangle \mid B_f = \langle \leftarrow, 0 \rangle$
2b	$D_g = \langle \leftarrow, \rightarrow \rangle \mid B_g = \langle \leftarrow, \rightarrow \rangle$
2c	$D_h = [-1, \rightarrow] \mid B_h = [0, \rightarrow]$
2d	$D_i = \langle \leftarrow, 2 \rangle \mid B_i = \langle \leftarrow, -2 \rangle$
2e	$D_j = \langle \leftarrow, 6 \rangle \cup \langle 6, \rightarrow \rangle \mid B_j = \langle \leftarrow, 0 \rangle \cup \langle 0, \rightarrow \rangle$
2f	$D_k = \langle \leftarrow, -3 \rangle \cup \langle -3, \rightarrow \rangle \mid B_k = \langle \leftarrow, 4 \rangle \cup \langle 4, \rightarrow \rangle$
3a	$-4 \leq x \leq 4$
3b	$x > 3$
3c	$x \geq 15$
3d	$x < -1 \vee x > -\frac{1}{2}$
4a	max. (5, 8)
4b	min. (0, 7)
4c	max. (-3, 2)
4d	pvs. (1, 0)
4e	min. (-2, -4)

5a	$y = 5(x - 8)^6 - 3$
5b	$y = -(x - 6)^3 + 5$
5c	$y = 3\sqrt{2(x - 4)} - 6$
5d	$y = \frac{1}{x+2} + 4$
6a	H.A. $y = 0$
6b	H.A. $y = 0$
6c	H.A. $y = 4$
6d	H.A. $y = 0$ en V.A. $x = 0$
6e	H.A. $y = 120$ en V.A. $x = -70$
6f	H.A. $y = 2$ en V.A. $x = \frac{4}{5}$
7a	$8a^{10}$
7b	$128a^{21}$
7c	$5a^6$
7d	$7a^5$
8a	$3a^{-2}$
8b	a^{-11}
8c	a^{-6}
8d	$4a^{-\frac{1}{2}}$
9a	$y = 3x^2$
9b	$y = 9x^{10}$
9c	$y = 25 \cdot 8^x$
9d	$y = 275 \cdot \left(\frac{1}{25}\right)^x$