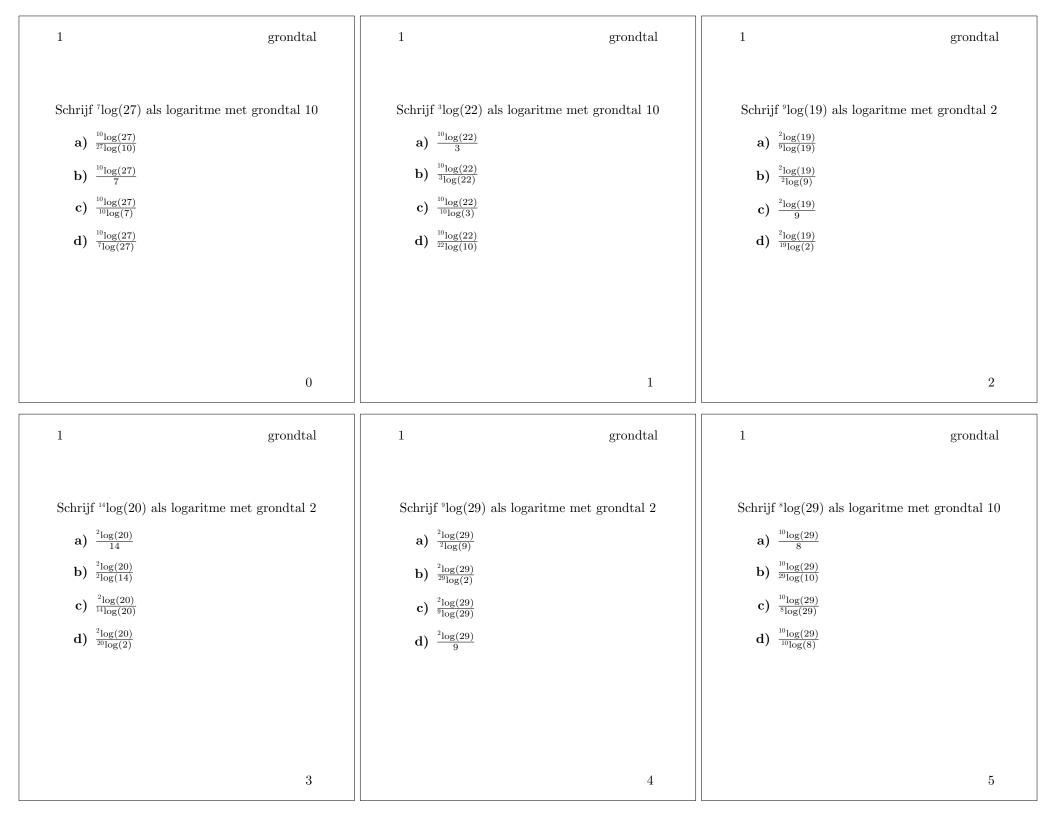
1	keer	1	keer	1	keer
Bereken ² log(4 · 8))	Bereken $^3\log($	3 · 27)	Bereken ²	$\log(8\cdot4)$
a) 5		a) 4		a) 32	
b) 16		b) 3		b) 6	
c) 6		c) 27		c) 5	
d) 32		d) 243		d) 16	
	0		1		2
1	keer	1	keer	1	keer
Bereken $^4 ext{log}(4\cdot 64$.)	Bereken ³log((3 · 9)	Bereken 3	$\log(3\cdot 9)$
a) 64		a) 2		a) 729	
b) 3		b) 243		b) 9	
c) 4		c) 3		c) 3	
d) 1024		d) 9		d) 2	
I .					

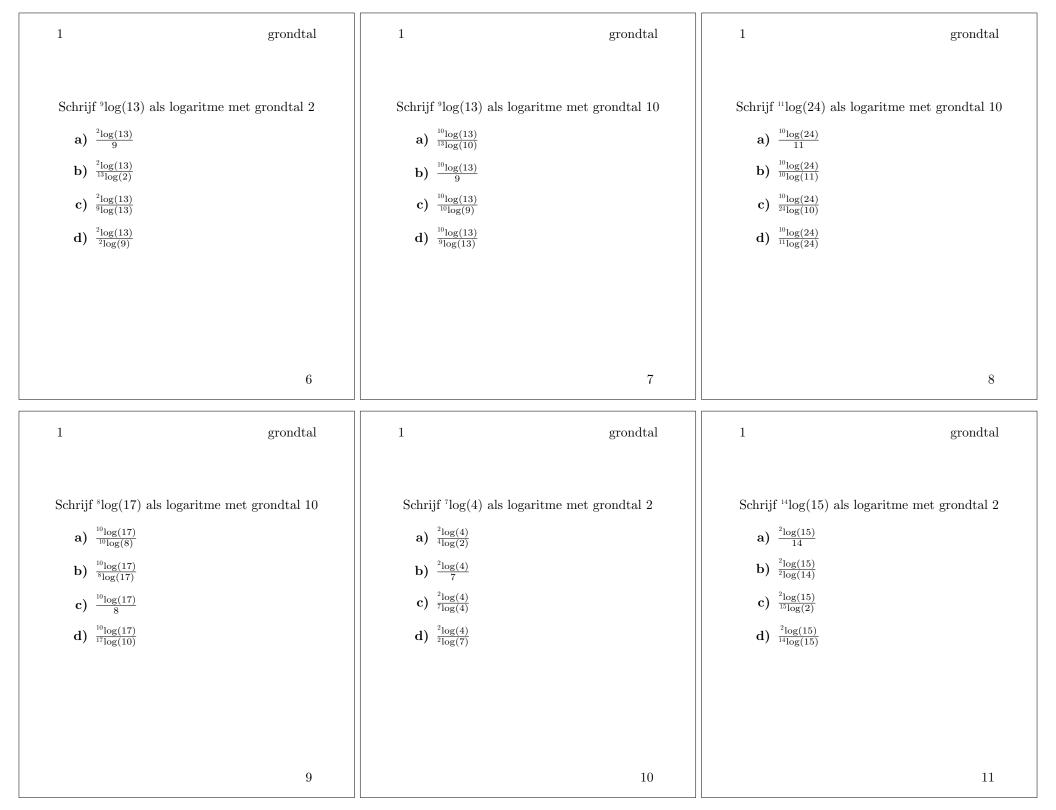
1	keer	1	keer	1	keer
Bereken $^4{ m log}(4\cdot 64)$		Bereken ²log	$g(8\cdot 4)$	Bereken ²	$\log(4\cdot 8)$
a) 4		a) 64		a) 6	
b) 3		b) 16		b) 32	
c) 64		c) 5		c) 16	
d) 1024		d) 6		d) 5	
	6		7		8
1	keer	1	keer	1	keer
Bereken $^2 \log(8 \cdot 4)$		Bereken ²log	$g(2\cdot 8)$	Bereken ²	$\log(2\cdot 4)$
a) 5		a) 8		a) 3	
b) 32		b) 3		b) 64	
c) 6		c) 4		c) 4	
d) 16		d) 64		d) 2	

1	keer	1	keer	1	keer
Bereken ³log($\left(\frac{3}{9}\right)$	Bereken 3	$\log(\frac{27}{9})$		$\log(rac{3}{9})$
a) -2		a) -6		a) 1	
b) 1		b) -27		b) -3	
c) -1		c) 1		c) -2	
d) 1		d) -1		d) -1	
	12		13		14
1	keer	1	keer	1	keer
Bereken ² log(2)	Bereken ⁴	$\log(\frac{4}{3})$	Bereker	$1 {}^2 \log(rac{2}{4})$
a) -1	47	a) -1	(16)	a) -2	1 108(4)
b) 1		b) 1		b) -1	
c) -2		c) -2		c) 1	
d) 1		d) 1		d) 1	

1	keer	1	keer	1	keer
Bereken ² lo	$g(\frac{2}{4})$	Bereken	$^4\log(\frac{64}{16})$	Bereken ($\log(\frac{64}{16})$
a) 1		a) -6		a) -1	
b) 1		b) -64		b) -64	
c) -1		c) -1		c) -6	
d) -2		d) 1		d) 1	
	18		19		20
1	keer	1	keer	1	keer
Bereken ⁴ log	$g(\frac{16}{64})$		$^4\log(rac{64}{16})$	Bereken	$2\log(\frac{4}{8})$
a) -6		a) 16		a) -6	
b) 1		b) -1		b) 4	
c) -1		c) -6		c) 1	
d) 1		d) 1		d) -1	

21 22 C) 1 d) 1 22 23





1	macht	1	macht	1	macht
Bereken ³log((3^1)	Bereken	$^2\log(2^6)$	Bereker	n $^5\mathrm{log}(5^2)$
a) $\frac{3}{1}$		a) 64		a) 25	
b) 3		b) $\frac{2}{6}$		b) 2	
c) 3		c) 12		c) 10	
d) 1		d) 6		d) $\frac{5}{2}$	
	0		1		2
1	macht	1	macht	1	macht
Bereken ⁵ log((5^1)	Bereken	$^5\mathrm{log}(5^9)$	Bereke	n ⁶ log(6 ⁶)
a) 5		a) $\frac{5}{9}$		a) $\frac{6}{6}$	
b) $\frac{5}{1}$		b) 45		b) 36	
c) 1		c) 1953125		c) 46656	
d) 5		d) 9		d) 6	

1	macht	1	macht	1	macht
Bereken ⁵ log	(5^6)	Bereke	on ${}^2\mathrm{log}(2^5)$	Bereken ⁶ le	$\log(6^{12})$
a) 30		a) $\frac{2}{5}$		a) 2176782336	
b) 15625		b) 32		b) 12	
c) $\frac{5}{6}$		c) 10		c) 72	
d) 6		d) 5		d) $\frac{6}{12}$	
	6		7		8
1	macht	1	macht	1	macht
	. 5		4 12		4.10
Bereken ⁵ log	(5°)		$^{1}\log(4^{13})$	Bereken ² le	$\log(2^{12})$
a) 5		a) $\frac{4}{13}$		a) 12	
b) 3125		b) 67108864		b) 24	
c) $\frac{5}{5}$		c) 52		c) $\frac{2}{12}$	
d) 25		d) 13		d) 4096	

1 1 1 omvorm omvorm Bereken p als $3^p = 81$ Bereken q als $5^q = 625$ Bereken p als $4^p = 64$ a) $p = {}^{3}\log(81) = 4$ a) $q = {}^{625}\log(5) = 4$ a) $p = {}^{16}\log(4) = 3$ **b)** $p = {}^{27}\log(3) = 4$ **b)** $q = {}^{5}\log(625) = 4$ **b)** $p = {}^{4}\log(16) = 3$ c) $p = {}^{81}\log(3) = 4$ c) $p = {}^{4}\log(64) = 3$ c) $q = {}^{5}\log(125) = 4$ **d)** $p = {}^{3}\log(27) = 4$ d) $q = {}^{125}\log(5) = 4$ **d)** $p = {}^{64}\log(4) = 3$ 0 1 1 1 1 omvorm omvormBereken x als $2^x = 4$ Bereken q als $5^q = 125$ Bereken q als $2^q = 16$ a) $x = {}^{2}\log(2) = 2$ a) $q = {}^{5}\log(25) = 3$ a) $q = {}^{2}\log(8) = 4$ **b)** $x = {}^{2}\log(2) = 2$ **b)** $q = {}^{25}\log(5) = 3$ **b)** $q = {}^{16}\log(2) = 4$ c) $x = {}^{4}\log(2) = 2$ c) $q = 5\log(125) = 3$ c) $q = {}^8\log(2) = 4$ **d)** $x = {}^{2}\log(4) = 2$ **d)** $q = {}^{125}\log(5) = 3$ **d)** $q = {}^{2}\log(16) = 4$ 3 4

omvorm

2

5

omvorm

1 1 1 omvorm omvorm Bereken t als $4^t = 16$ Bereken t als $2^t = 4$ Bereken x als $4^x = 16$ a) $t = {}^{16}\log(4) = 2$ a) $t = {}^{2}\log(4) = 2$ a) $x = {}^{4}\log(4) = 2$ **b)** $t = {}^{4}\log(4) = 2$ **b)** $t = {}^{4}\log(2) = 2$ **b)** $x = {}^{4}\log(4) = 2$ c) $t = {}^{2}\log(2) = 2$ c) $t = {}^{4}\log(4) = 2$ c) $x = {}^{16}\log(4) = 2$ **d)** $t = {}^{4}\log(16) = 2$ **d)** $t = {}^{2}\log(2) = 2$ **d)** $x = {}^{4}\log(16) = 2$ 6 7 1 1 1 omvorm omvormBereken t als $5^t = 625$ Bereken x als $5^x = 125$ Bereken x als $2^x = 4$ a) $t = {}^{125}\log(5) = 4$ a) $x = {}^{5}\log(25) = 3$ a) $x = {}^{2}\log(4) = 2$ **b)** $x = {}^{5}\log(125) = 3$ **b)** $t = {}^{625}\log(5) = 4$ **b)** $x = {}^{2}\log(2) = 2$ c) $x = {}^{25}\log(5) = 3$ c) $t = {}^{5}\log(125) = 4$ c) $x = {}^{2}\log(2) = 2$ **d)** $t = {}^{5}\log(625) = 4$ **d)** $x = {}^{125}\log(5) = 3$ **d)** $x = {}^{4}\log(2) = 2$ 10 9

omvorm

8

omvorm

Herleid ${}^{4}\log(4x)$ a) $1 + {}^{4}\log(x)$ b) $1 \cdot {}^{4}\log(x)$ c) $1 + {}^{4}\log(x)$ d) $16 + {}^{4}\log(x)$		Herleid ${}^{2}\log(2x)$ a) $1 + {}^{2}\log(x)$ b) $1 + {}^{2}\log(x)$ c) $1 \cdot {}^{2}\log(x)$ d) $4 + {}^{2}\log(x)$		Herleid ${}^{3}\log(3)$ a) $9 + {}^{3}\log(x)$ b) $1 + {}^{3}\log(x)$ c) $1 + {}^{3}\log(x)$ d) $1 \cdot {}^{3}\log(x)$	3x)
	0		1		2
2	keer	2	keer	2	keer
Herleid $^2\log(16x)$		Herleid ³ log(81x)		Herleid ³log(3x)
a) $4 + {}^{2}\log(x)$		a) $4 + {}^{3}\log(x)$		a) $1 + {}^{3}\log(x)$	
$\mathbf{b)} \ \ 4 \cdot {}^{2}\mathrm{log}(x)$		$\mathbf{b)} \ \ 4 \cdot {}^{3}\mathrm{log}(x)$		b) $9 + {}^{3}\log(x)$	
c) $32 + {}^{2}\log(x)$		c) $243 + {}^{3}\log(x)$		c) $1 + {}^{3}\log(x)$	
d) $8 + {}^{2}\log(x)$		d) $27 + {}^{3}\log(x)$		$\mathbf{d)} \ \ 1 \cdot {}^{3}\mathrm{log}(x)$	
	3		4		5

keer

2

2

keer

keer

	Herleid ${}^{4}\log(\frac{x}{16}$ a) ${}^{4}\log(x) + 4$ b) ${}^{4}\log(x) - 2$ c) ${}^{4}\log(x) - 64$ d) $-2 \cdot {}^{4}\log(x)$		Herleid ${}^4\log(x) - 4$ a) ${}^4\log(x) - 4$ b) $-4 \cdot {}^4\log(x)$ c) ${}^4\log(x) - 1024$ d) ${}^4\log(x) + 64$	$\left(\frac{x}{56}\right)$
6		7		8
keer	2	keer	2	keer
	Herleid $^{3}\log(\frac{x}{2})$)	Herleid ⁴ log(-	$\frac{x}{x}$
				167
	c) $^{3}\log(x) - 27$		c) $^{4}\log(x) - 64$	
	d) $^{3}\log(x) - 2$		d) ${}^4{\log}(x) - 2$	
9		10		11
	keer	a) ${}^{4}\log(x) + 4$ b) ${}^{4}\log(x) - 2$ c) ${}^{4}\log(x) - 64$ d) ${}^{-2}\cdot {}^{4}\log(x)$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

keer

keer

2

keer

_					
Herleid ${}^{2}\log(4x) + {}^{2}\log(5)$ to	t één logaritme	Herleid ${}^3\mathrm{log}(6x) + {}^3\mathrm{log}(3)$ to	één logaritme	Herleid ${}^4\mathrm{log}(5x) + {}^4\mathrm{log}(5x)$) tot één logaritme
a) $2\log(1x)$		a) $^{3}\log(6x+3)$		a) ${}^{4}\log(5x+5)$	
b) ${}^{2}\log(4x+5)$		$\mathbf{b)}^{-3}\log(18x)$		b) $^{4}\log(10x)$	
$\mathbf{c)}^{-2}\mathrm{log}(9x)$		c) ${}^{3}\log(9x)$		c) ${}^{4}\log(0x)$	
d) ${}^{2}\log(20x)$		$\mathbf{d)}^{-3}\mathrm{log}(5x)$		d) $^{4}\log(25x)$	
	12		13		14
2	keer	2	keer	2	keer
Herleid ${}^{3}\log(7x) + {}^{3}\log(6)$ to	t één logaritme	Herleid ${}^2\mathrm{log}(7x) + {}^2\mathrm{log}(2)$ to	één logaritme	Herleid ${}^{3}\log(2x) + {}^{3}\log(7x)$	') tot één logaritme
a) $3\log(1x)$		a) ${}^{2}\log(7x+2)$		a) $^{3}\log(14x)$	
b) $^{3}\log(42x)$		$\mathbf{b)}^{-2}\mathrm{log}(14x)$		$\mathbf{b)}^{-3}\mathrm{log}(5x)$	
c) $^{3}\log(7x+6)$		$\mathbf{c)}^{-2}\mathrm{log}(9x)$		c) $^{3}\log(2x+7)$	
d) $^{3}\log(13x)$		$\mathbf{d)}^{-2}\mathrm{log}(5x)$		$\mathbf{d)} \ ^{3}\mathrm{log}(9x)$	

keer

2

2

keer

keer

2 keer 2 keer 2 Herleid ${}^{4}\log(2x) - {}^{4}\log(7)$ tot één logaritme Herleid ${}^{3}\log(4x) - {}^{3}\log(7)$ tot één logaritme Herleid ${}^{3}\log(5x) - {}^{3}\log(6)$ tot één logaritme a) $3\log(5x-6)$ a) ${}^{3}\log(\frac{7x}{4})$ a) $^{4}\log(14x)$ **b)** $^{3}\log(\frac{4x}{7})$ **b)** $^{4}\log(\frac{2x}{7})$ **b)** $3\log(30x)$ **c)** $^{4}\log(\frac{7x}{2})$ c) $3\log(\frac{5x}{6})$ c) $^{3}\log(28x)$ **d)** ${}^{3}\log(\frac{6x}{5})$ **d)** $^{3}\log(4x-7)$ **d)** $^{4}\log(2x-7)$ 18 19 2 2 keer 2 keer Herleid ${}^{3}\log(3x) - {}^{3}\log(5)$ tot één logaritme Herleid ${}^{2}\log(3x) - {}^{2}\log(3)$ tot één logaritme Herleid ${}^{2}\log(6x) - {}^{2}\log(4)$ tot één logaritme **a)** ${}^{2}\log(\frac{3x}{3})$ a) $3\log(15x)$ a) ${}^{2}\log(24x)$ **b)** $^{3}\log(\frac{3x}{5})$ **b)** ${}^{2}\log(\frac{4x}{6})$ **b)** ${}^{2}\log(9x)$ c) $3\log(\frac{5x}{3})$ c) ${}^{2}\log(3x-3)$ c) ${}^{2}\log(\frac{6x}{4})$ **d)** ${}^{2}\log(\frac{3x}{3})$ **d)** ${}^{2}\log(6x-4)$ **d)** ${}^{3}\log(3x-5)$ 21 22

keer

20

keer

2	macm	2	macht	2	macm
Bereken ³log	$g(\frac{1}{3^4} \cdot \sqrt[2]{3})$	Bereken ${}^5\mathrm{log}({}^3_{\mathbf{V}}$	$\sqrt{5} \cdot \frac{1}{5^2}$	Bereken $^6\log(\sqrt{3})$	$\sqrt[2]{6}\cdot\sqrt[3]{6}$
a) -2		a) -1.66667		a) 0.166667	
b) 0.0213833		b) -0.666667		b) 5	
c) -10.5		c) 0.068399		c) 0.833333	
d) -3.5		d) -8.33333		d) 4.45102	
	0		1		2
2	macht	2	macht	2	macht
Bereken ²loe	$g(2^2 \cdot \sqrt[4]{2})$	Bereken $^6\log(\sqrt[6]{2})$	$\sqrt{6} \cdot 6^3$)	Bereken ⁴ log(4	$4^4 \cdot \sqrt[3]{4}$
Bereken ²log	$g(2^2 \cdot \sqrt[4]{2})$	Bereken $^6\mathrm{log}(^2_{ m V}$	$\sqrt{6} \cdot 6^3$)	Bereken ⁴ log(4	$4^4 \cdot \sqrt[3]{4})$
a) 4.5	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5	$\sqrt{6} \cdot 6^3$)	a) 17.3333	$4^4 \cdot \sqrt[3]{4})$
a) 4.5b) 0.5	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21	$\sqrt{6} \cdot 6^3$)	a) 17.3333b) 4.33333	$4^4 \cdot \sqrt[3]{4}$
a) 4.5b) 0.5c) 2.25	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21c) 529.09	$\sqrt{6} \cdot 6^3$)	a) 17.3333b) 4.33333c) 1.33333	$4^4 \cdot \sqrt[3]{4}$
a) 4.5b) 0.5	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21	$\sqrt{6} \cdot 6^3$)	a) 17.3333b) 4.33333	$4^4 \cdot \sqrt[3]{4}$)
a) 4.5b) 0.5c) 2.25	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21c) 529.09	$\sqrt{6} \cdot 6^3$)	a) 17.3333b) 4.33333c) 1.33333	$4^4 \cdot \sqrt[3]{4}$
a) 4.5b) 0.5c) 2.25	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21c) 529.09	$\sqrt{6} \cdot 6^3$)	a) 17.3333b) 4.33333c) 1.33333	$4^4 \cdot \sqrt[3]{4}$
a) 4.5b) 0.5c) 2.25	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21c) 529.09	$\sqrt{6}\cdot 6^3$)	a) 17.3333b) 4.33333c) 1.33333	$4^4 \cdot \sqrt[3]{4}$
a) 4.5b) 0.5c) 2.25	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21c) 529.09	$\sqrt{6}\cdot 6^3$)	a) 17.3333b) 4.33333c) 1.33333	$4^4 \cdot \sqrt[3]{4}$
a) 4.5b) 0.5c) 2.25	$g(2^2 \cdot \sqrt[4]{2})$	a) 1.5b) 21c) 529.09	$\sqrt{6} \cdot 6^3$)	a) 17.3333b) 4.33333c) 1.33333	$4^4 \cdot \sqrt[3]{4})$

macht

2

2

macht

macht

2	macht	2	macht	2	macht
Bereken ${}^{2}\log(\frac{1}{2^{3}}\cdot\frac{1}{2^{2}})$	7)	Bereken ³log	$g(3^3 \cdot 3^4)$	Bereken ${}^5\mathrm{log}(\sqrt{3})$	$\sqrt[2]{5} \cdot \frac{1}{5^4}$
a) 0.03125		a) 2187		a) -17.5	
b) -5		b) 21		b) 0.00357771	
c) 6		c) 7		c) -2	
d) -10		d) 12		d) -3.5	
	6		7		8
2	macht	2	macht	2	macht
D 1 21 (1 1		D 1 21	(3/9 93)	D 1 51 /	1 3/5)
Bereken ${}^{2}\log(\frac{1}{2^{1}}\cdot\frac{1}{2^{4}})$	7)	Bereken ³log	$g(\sqrt[8]{3}\cdot 3^3)$	Bereken ${}^5\mathrm{log}({}_{\overline{\epsilon}}$	$\frac{1}{\sqrt{3}} \cdot \sqrt[3]{5}$
a) 4		a) 38.9407		a) -1	
b) -5		b) 1		b) -2.66667	
c) 0.03125		c) 10		c) -13.3333	
d) -10		d) 3.33333		d) 0.0136798	
	9		10		11

Herleid $y = {}^{4}\log(256x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 4 + \frac{1}{2} \log(x)$$

b)
$$y = 5 + \frac{1}{2} \log(x)$$

c)
$$y = 4 + \frac{1}{4} \log(x)$$

d)
$$y = 2 + \frac{1}{4} \log(x)$$

Herleid $y = {}^{4}\log(64x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 4 + \frac{1}{2} \log(x)$$

b)
$$y = 3 + \frac{1}{2} \log(x)$$

c)
$$y = 2 + \frac{1}{3} \log(x)$$

d)
$$y = 3 + \frac{1}{4} \log(x)$$

a) $y = 2 + \frac{1}{2} \log(x)$

b) $y = 1 + \frac{1}{9} \log(x)$

c) $y = 2 + \frac{1}{1} \log(x)$

d) $y = 1 + \frac{1}{2} \log(x)$

Herleid $y = {}^{9}\log(9x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 1 + \frac{1}{2} \log(x)$$

2

b)
$$y = 1 + \frac{1}{9} \log(x)$$

c)
$$y = 2 + \frac{1}{2} \log(x)$$

d)
$$y = 2 + \frac{1}{1} \log(x)$$

0

herleid

1

2 herleid

Herleid $y = {}^{216}\log(216x)$ tot de vorm $y = a + b \cdot {}^{6}\log(x)$

a)
$$y = 3 + \frac{1}{1} \log(x)$$

b)
$$y = 1 + \frac{1}{216} \log(x)$$

c)
$$y = 1 + \frac{1}{2} \log(x)$$

d)
$$y = 2 + \frac{1}{3} \log(x)$$

2

herleid

Herleid $y = {}^{9}\log(9x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

2

Herleid $y = {}^{16}\log(16x)$ tot de vorm $y = a + b \cdot {}^{4}\log(x)$

a)
$$y = 2 + \frac{1}{1} \log(x)$$

b)
$$y = 1 + \frac{1}{16} \log(x)$$

c)
$$y = 2 + \frac{1}{2} \log(x)$$

d)
$$y = 1 + \frac{1}{2} \log(x)$$

3

4

5

2

herleid

Herleid $y = {}^{9}\log(81x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 2 + \frac{1}{9} \log(x)$$

b)
$$y = 2 + \frac{1}{2} \log(x)$$

c)
$$y = 3 + \frac{1}{2} \log(x)$$

d)
$$y = 2 + \frac{1}{2} \log(x)$$

Herleid $y = {}^{16}\log(256x)$ tot de vorm $y = a + b \cdot {}^{4}\log(x)$

a)
$$y = 2 + \frac{1}{16} \log(x)$$

b)
$$y = 2 + \frac{1}{2} \log(x)$$

c)
$$y = 2 + \frac{1}{2} \log(x)$$

d)
$$y = 3 + \frac{1}{2} \log(x)$$

Herleid $y = {}^{16}\log(16x)$ tot de vorm $y = a + b \cdot {}^{4}\log(x)$

a)
$$y = 1 + \frac{1}{2} \log(x)$$

2

2

b)
$$y = 2 + \frac{1}{1} \log(x)$$

c)
$$y = 1 + \frac{1}{16} \log(x)$$

d)
$$y = 2 + \frac{1}{2} \log(x)$$

8

2 herleid

6

2

herleid

7

herleid

Herleid $y = {}^{9}\log(81x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 3 + \frac{1}{2} \log(x)$$

b)
$$y = 2 + \frac{1}{2} \log(x)$$

c)
$$y = 2 + \frac{1}{2} \log(x)$$

d)
$$y = 2 + \frac{1}{9} \log(x)$$

Herleid $y = {}^{81}\log(81x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 1 + \frac{1}{81} \log(x)$$

b)
$$y = 2 + \frac{1}{4} \log(x)$$

c)
$$y = 1 + \frac{1}{4} \log(x)$$

d)
$$y = 4 + \frac{1}{1} \log(x)$$

Herleid $y = {}^{8}\log(8x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 1 + \frac{1}{8} \log(x)$$

b)
$$y = 2 + \frac{1}{3} \log(x)$$

c)
$$y = 1 + \frac{1}{3} \log(x)$$

d)
$$y = 3 + \frac{1}{1} \log(x)$$

9

10

2	totmacht
Herleid y	$= {}^5\mathrm{log}(4^4)$
a) $y = 4 \cdot {}^{5}\log(4)$	
b) $y = 4 + {}^{5}\log(4)$	
c) $y = 4 \cdot {}^{5}\log(4)$	
d) $y = 4 + {}^{5}\log(4)$	

2 totmacht

Herleid $y = {}^{7}\mathrm{log}(2^{2})$ a) $y = 2 \cdot {}^{7}\mathrm{log}(2)$

b) $y = 2 + {}^{7}\log(2)$

c) $y = 2 \cdot {}^{7}\log(2)$

d) $y = 2 + {}^{7}\log(2)$

 $2 \hspace{2cm} {\rm totmacht} \\$

Herleid $y = {}^{3}\log(6^{1})$

a) $y = 1 + 3\log(6)$

b) $y = 6 \cdot {}^{3}\log(1)$

c) $y = 1 \cdot {}^{3}\log(6)$

d) $y = 6 + 3\log(1)$

1

totmacht

totmacht

Herleid $y = {}^{8}\log(6^{1})$

a) $y = 6 \cdot {}^8 \log(1)$

2

b) $y = 6 + {}^{8}\log(1)$

c) $y = 1 \cdot {}^8 \log(6)$

d) $y = 1 + {}^{8}\log(6)$

2 totmacht

Herleid $y = {}^{7}\log(2^2)$

a) $y = 2 \cdot {}^{7}\log(2)$

2

b) $y = 2 + {}^{7}\log(2)$

c) $y = 2 \cdot {}^{7}\log(2)$

d) $y = 2 + {}^{7}\log(2)$

Herleid $y = {}^{4}\log(4^{3})$

a) $y = 4 + {}^{4}\log(3)$

b) $y = 3 \cdot {}^{4}\log(4)$

c) $y = 4 \cdot {}^{4}\log(3)$

d) $y = 3 + {}^{4}\log(4)$

3

4

5

2		totmacht
	Herleid $y = {}^{2}\log(3^{1})$	
	a) $y = 3 + {}^{2}\log(1)$	
	b) $y = 1 + {}^{2}\log(3)$	
	c) $y = 1 \cdot {}^{2}\log(3)$	
	d) $y = 3 \cdot {}^{2}\log(1)$	

Herleid
$$y = {}^{6}\log(2^{3})$$

a)
$$y = 3 + {}^{6}\log(2)$$

b)
$$y = 2 + {}^{6}\log(3)$$

c)
$$y = 2 \cdot {}^{6}\log(3)$$

d)
$$y = 3 \cdot {}^{6}\log(2)$$

totmacht

totmacht

Herleid
$$y = {}^{8}\log(6^{1})$$

a)
$$y = 6 + {}^{8}\log(1)$$

b)
$$y = 6 \cdot {}^8 \log(1)$$

c)
$$y = 1 + {}^{8}\log(6)$$

d)
$$y = 1 \cdot {}^8 \log(6)$$

Herleid
$$y = {}^{2}\log(3^{3})$$

a)
$$y = 3 \cdot {}^{2}\log(3)$$

b)
$$y = 3 + {}^{2}\log(3)$$

c)
$$y = 3 + {}^{2}\log(3)$$

d)
$$y = 3 \cdot {}^{2}\log(3)$$

Herleid
$$y = {}^8\log(2^3)$$

a)
$$y = 3 + {}^{8}\log(2)$$

b) $y = 2 \cdot {}^{8}\log(3)$

c)
$$y = 3 \cdot {}^8 \log(2)$$

d)
$$y = 2 + {}^{8}\log(3)$$

Herleid $y = {}^{6}\log(2^{3})$

a)
$$y = 2 + {}^{6}\log(3)$$

b)
$$y = 3 + {}^{6}\log(2)$$

c)
$$y = 2 \cdot {}^{6}\log(3)$$

d)
$$y = 3 \cdot {}^{6}\log(2)$$

totmacht

totmacht

a) $x = \frac{3^{8y-0}}{13}$

b) $x = \frac{0}{8}3^{y-13}$

d) $x = \frac{3^{y-13}-0}{8}$

c) $x = {}^{3}\log(8y - 13) - 0$

omvorm

Druk x uit in y bij $y = 0 + {}^{2}\log(8 \cdot x + 12)$

a)
$$x = \frac{2^{y-0}-12}{8}$$

b)
$$x = \frac{12}{8}2^{y-0}$$

c)
$$x = {}^{2}\log(8y - 0) - 12$$

d)
$$x = \frac{2^{8y-12}}{0}$$

Druk x uit in y bij $y = 13 + {}^{3}\log(8 \cdot x + 0)$ Druk x uit in y bij $y = 10 + {}^{2}\log(10 \cdot x + 7)$

a)
$$x = \frac{7}{10}2^{y-10}$$

b)
$$x = \frac{2^{y-10}-7}{10}$$

3

omvorm

1

c)
$$x = {}^{2}\log(10y - 10) - 7$$

d)
$$x = \frac{2^{10y-7}}{10}$$

0

omvorm

omvorm

3 omvorm

2

5

Druk x uit in y bij $y = 9 + {}^{2}\log(6 \cdot x + 0)$

a)
$$x = \frac{2^{6y-0}}{9}$$

3

b)
$$x = \frac{2^{y-9}-0}{6}$$

c)
$$x = \frac{0}{6}2^{y-9}$$

d)
$$x = {}^{2}\log(6y - 9) - 0$$

Druk x uit in y bij $y = 0 + {}^{3}\log(4 \cdot x + 2)$

a)
$$x = \frac{2}{4}3^{y-0}$$

3

b)
$$x = \frac{3^{4y-2}}{0}$$

c)
$$x = \frac{3^{y-0}-2}{4}$$

d)
$$x = {}^{3}\log(4y - 0) - 2$$

Druk x uit in y bij $y = 3 + {}^{4}\log(10 \cdot x + 3)$

a)
$$x = {}^{4}\log(10y - 3) - 3$$

b)
$$x = \frac{4^{y-3}-3}{10}$$

c)
$$x = \frac{3}{10}4^{y-3}$$

d)
$$x = \frac{4^{10y-3}}{3}$$

omvorm

Druk x uit in y bij $y = 1 + {}^{4}\log(4 \cdot x + 7)$

a)
$$x = \frac{4^{4y-7}}{1}$$

b)
$$x = \frac{7}{4}4^{y-1}$$

c)
$$x = {}^{4}\log(4y - 1) - 7$$

d)
$$x = \frac{4^{y-1}-7}{4}$$

Druk x uit in y bij $y = 0 + {}^{3}\log(3 \cdot x + 0)$

a)
$$x = \frac{0}{3}3^{y-0}$$

3

b)
$$x = \frac{3^{3y-0}}{0}$$

c)
$$x = {}^{3}\log(3y - 0) - 0$$

d)
$$x = \frac{3^{y-0}-0}{3}$$

Druk x uit in y bij $y = 0 + {}^{3}\log(9 \cdot x + 12)$

a)
$$x = \frac{3^{9y-12}}{0}$$

3

omvorm

b)
$$x = \frac{12}{9}3^{y-0}$$

c)
$$x = \frac{3^{y-0}-12}{9}$$

d)
$$x = {}^{3}\log(9y - 0) - 12$$

6

omvorm

omvorm

3 omvorm

Druk x uit in y bij $y = 0 + {}^{3}\log(8 \cdot x + 4)$

a)
$$x = \frac{3^{8y-4}}{0}$$

3

b)
$$x = \frac{3^{y-0}-4}{8}$$

c)
$$x = {}^{3}\log(8y - 0) - 4$$

d)
$$x = \frac{4}{8}3^{y-0}$$

Druk x uit in y bij $y = 0 + {}^{4}\log(9 \cdot x + 0)$

a)
$$x = {}^{4}\log(9y - 0) - 0$$

b)
$$x = \frac{0}{9}4^{y-0}$$

3

c)
$$x = \frac{4^{9y-0}}{0}$$

d)
$$x = \frac{4^{y-0}-0}{9}$$

Druk x uit in y bij $y = 0 + {}^{4}\log(6 \cdot x + 2)$

a)
$$x = \frac{2}{6}4^{y-0}$$

b)
$$x = \frac{4^{y-0}-2}{6}$$

c)
$$x = {}^{4}\log(6y - 0) - 2$$

d)
$$x = \frac{4^{6y-2}}{0}$$

7

Bereken met hoeveel $y = {}^{3}\log(243)$ wordt vermenigt		Bereken met hoeveel $y = {}^{2}\log y$ wordt verme			$= {}^{4}\log(4x)$ to eneemt als x met 3 vermenigvuldigd
a) keer 5		a) keer 1.58496		a) plus 0.7924	81
b) plus 5		b) keer 2		b) keer 1	
c) keer 1.26186		c) plus 2		c) plus 1	
d) plus 1.26186		d) plus 1.58496		d) keer 0.792481	
	0		1		2
2		2		2	
3	vermeerder	3	vermeerder	3	vermeerder
Bereken met hoeveel $y = {}^{4}\log(1x)$ toeneemt als x met 2 wordt vermenigvuldigd		Bereken met hoeveel $y = {}^{4}\log x$ 3 wordt verme			= ${}^{4}\log(1024x)$ to eneemt als x met vermenigvuldigd
a) plus 0.5		a) keer 0.792481		a) plus 1	
b) keer 0.5		b) plus 0.792481		b) keer 5	
c) keer 0		c) plus 5		c) keer 1	
d) plus 0		d) keer 5		d) plus 5	
, ,		,		, 1	
1					

vermeerder

vermeerder

3

vermeerder

3	vermeerder	3	vermeerder	3	vermeerder	
Bereken met hoeveel u	$y = {}^{4}\log(1x)$ to eneemt als x met 2	Bereken met hoeveel $y =$	$^{4}\log(256x)$ to eneemt als x met 3	Bereken met hoeveel y :	$= {}^{3}\log(1x)$ to eneemt als x met 2	
	vermenigvuldigd	wordt vermenigvuldigd		wordt vermenigvuldigd		
a) plus 0.5		a) plus 4		a) keer 0		
b) keer 0.5		b) plus 0.79248	31	b) plus 0.63093	3	
c) plus 0		c) keer 0.79248	31	c) keer 0.63093	3	
d) keer 0	d) keer 0		d) keer 4		d) plus 0	
	6		7		8	
3	vermeerder	3	vermeerder	3	vermeerder	
Bereken met hoeveel $y = {}^{3}\log(243x)$ toeneemt als x met 3 wordt vermenigvuldigd		Bereken met hoeveel $y = {}^{2}\log(1x)$ toeneemt als x met 2 wordt vermenigvuldigd		Bereken met hoeveel $y = {}^{2}\log(1x)$ toeneemt als x met 2 wordt vermenigvuldigd		
a) keer 1		a) plus 1		a) plus 1		
b) plus 1		b) plus 0		b) keer 0		
c) plus 5		c) keer 0		c) keer 1		
d) keer 5		d) keer 1		d) plus 0		
	9		10		11	

herleid

herleid

Herleid $y = {}^{27}\log(27x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 2 + \frac{1}{3} \log(x)$$

b)
$$y = 1 + \frac{1}{27} \log(x)$$

c)
$$y = 1 + \frac{1}{3} \log(x)$$

d)
$$y = 3 + \frac{1}{1} \log(x)$$

Herleid $y = {}^{4}\log(16x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 2 + \frac{1}{2} \log(x)$$

b)
$$y = 2 + \frac{1}{4} \log(x)$$

c)
$$y = 2 + \frac{1}{2} \log(x)$$

d)
$$y = 3 + \frac{1}{2} \log(x)$$

Herleid $y = {}^{216}\log(216x)$ tot de vorm $y = a + b \cdot {}^{6}\log(x)$

a)
$$y = 3 + \frac{1}{1} \log(x)$$

3

3

b)
$$y = 1 + \frac{1}{3} \log(x)$$

c)
$$y = 2 + \frac{1}{3} \log(x)$$

d)
$$y = 1 + \frac{1}{216} \log(x)$$

3

0

1

herleid

3 herleid

Herleid $y = {}^{125}\log(125x)$ tot de vorm $y = a + b \cdot {}^{5}\log(x)$

a)
$$y = 3 + \frac{1}{1} \log(x)$$

b)
$$y = 2 + \frac{1}{3} \log(x)$$

c)
$$y = 1 + \frac{1}{3} \log(x)$$

d)
$$y = 1 + \frac{1}{125} \log(x)$$

Herleid $y = {}^{4}\log(4x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 2 + \frac{1}{2} \log(x)$$

b)
$$y = 2 + \frac{1}{1} \log(x)$$

c)
$$y = 1 + \frac{1}{2} \log(x)$$

d)
$$y = 1 + \frac{1}{4} \log(x)$$

Herleid $y = {}^{16}\log(16x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 2 + \frac{1}{4} \log(x)$$

b)
$$y = 1 + \frac{1}{4} \log(x)$$

c)
$$y = 4 + \frac{1}{1} \log(x)$$

d)
$$y = 1 + \frac{1}{16} \log(x)$$

3

4

5

2

herleid

3

herleid

herleid

Herleid $y = {}^{9}\log(9x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 1 + \frac{1}{9} \log(x)$$

b)
$$y = 2 + \frac{1}{1} \log(x)$$

c)
$$y = 2 + \frac{1}{2} \log(x)$$

d)
$$y = 1 + \frac{1}{2} \log(x)$$

Herleid $y = {}^{9}\log(9x)$ tot de vorm $y = a + b \cdot {}^{3}\log(x)$

a)
$$y = 1 + \frac{1}{9} \log(x)$$

b)
$$y = 2 + \frac{1}{2} \log(x)$$

c)
$$y = 1 + \frac{1}{2} \log(x)$$

d)
$$y = 2 + \frac{1}{1} \log(x)$$

Herleid $y = {}^{256}\log(256x)$ tot de vorm $y = a + b \cdot {}^{4}\log(x)$

a)
$$y = 1 + \frac{1}{4} \log(x)$$

3

3

b)
$$y = 4 + \frac{1}{1} \log(x)$$

c)
$$y = 2 + \frac{1}{4} \log(x)$$

d)
$$y = 1 + \frac{1}{256} \log(x)$$

8

3 herleid

6

herleid

7

herleid

Herleid $y = {}^{216}\log(216x)$ tot de vorm $y = a + b \cdot {}^{6}\log(x)$

a)
$$y = 2 + \frac{1}{3} \log(x)$$

b)
$$y = 1 + \frac{1}{3} \log(x)$$

c)
$$y = 1 + \frac{1}{216} \log(x)$$

d)
$$y = 3 + \frac{1}{1} \log(x)$$

Herleid $y = {}^{25}\log(25x)$ tot de vorm $y = a + b \cdot {}^{5}\log(x)$

a)
$$y = 2 + \frac{1}{1} \log(x)$$

b)
$$y = 1 + \frac{1}{2} \log(x)$$

c)
$$y = 1 + \frac{1}{25} \log(x)$$

d)
$$y = 2 + \frac{1}{2} \log(x)$$

Herleid $y = {}^{8}\log(8x)$ tot de vorm $y = a + b \cdot {}^{2}\log(x)$

a)
$$y = 2 + \frac{1}{3} \log(x)$$

b)
$$y = 3 + \frac{1}{1} \log(x)$$

c)
$$y = 1 + \frac{1}{3} \log(x)$$

d)
$$y = 1 + \frac{1}{8} \log(x)$$

9

10

bereken bereken bereken 4 4 4 Gegeven is dat $\log(a) = 6$. Bereken $\log(\sqrt{a^4})$ Gegeven is dat $\log(a) = 6$. Bereken $\log(a\sqrt{a})$ Gegeven is dat $\log(a) = 6$. Bereken $\log(\sqrt{100a}\sqrt{a})$ **a**) 8 **a)** 18 **a**) 11 **b**) 24 **b**) 7.5 **b**) 7 **c**) 9 **c**) 12 **c)** 18 **d**) 3 **d**) 3.5 **d**) 9 0 1 2 bereken bereken bereken 4 4 4 Gegeven is dat $\log(a) = 6$. Bereken $\log(0.001a^2)$ Gegeven is dat $\log(a) = 6$. Bereken $\log(\frac{1}{\sqrt{a}})$ Schrijf als macht van 10: $\sqrt{2000}$ **a)** $10^{0.83}$ **a**) 9 **a)** 12 **b)** $10^{2.48}$ **b**) 18 **b**) -12 **c)** $10^{1.65}$ **c)** -18 **c**) 3 **d**) $10^{3.30}$ **d**) 3 **d**) -3 3 5 4

