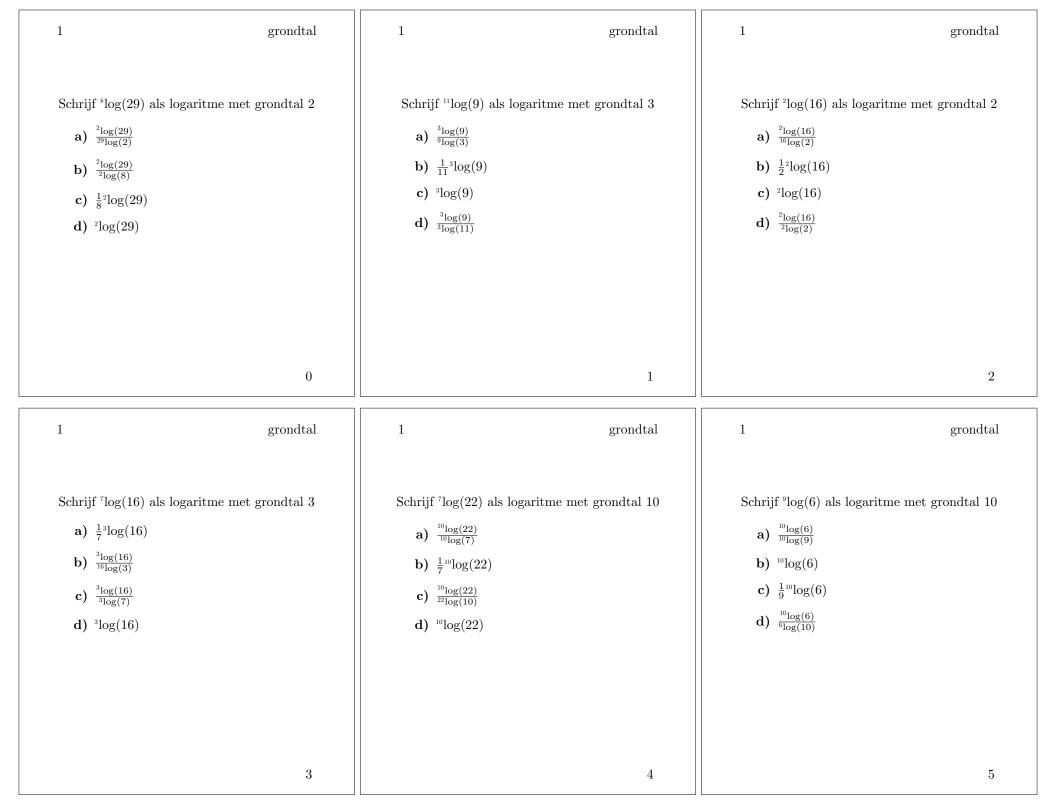
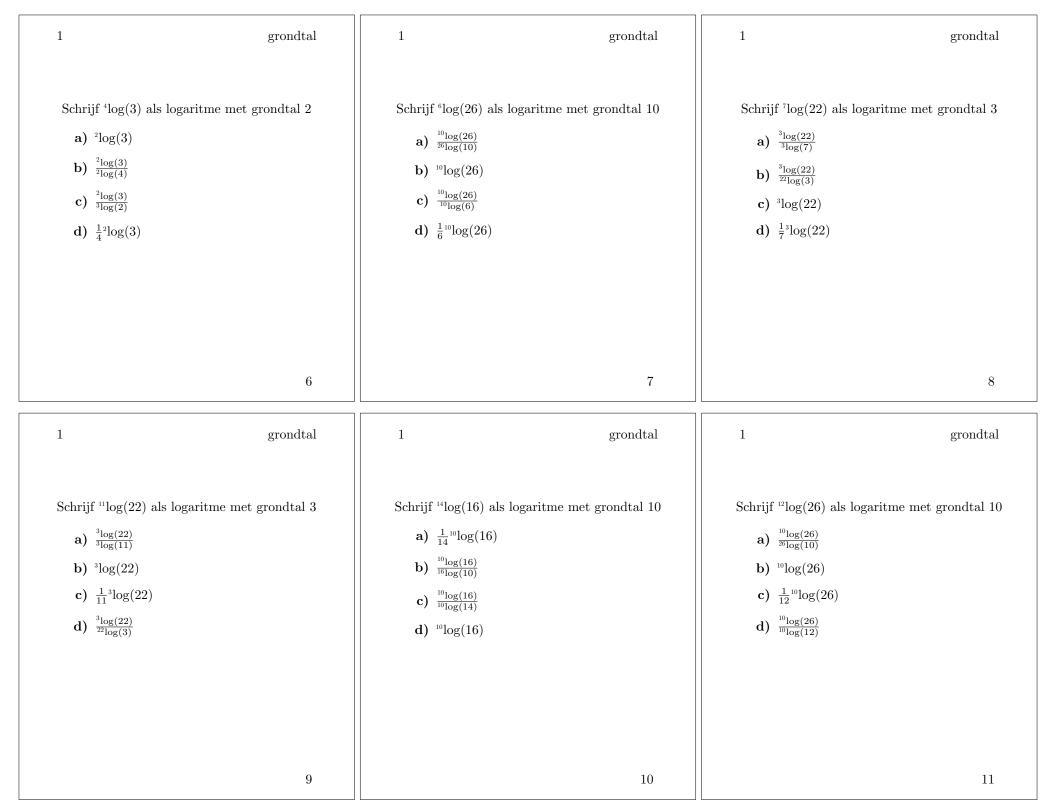
1	keer	1	keer	1	keer
Bereken <sup>4</sup> log(64 ·	16)	Bereken ³log(	(3 · 27)	Bereken ³l	$\log(9\cdot27)$
<b>a</b> ) 6		<b>a</b> ) 27		<b>a</b> ) 5	
<b>b)</b> 1024		<b>b</b> ) 4		<b>b</b> ) 6	
<b>c</b> ) 256		<b>c</b> ) 3		<b>c</b> ) 729	
<b>d</b> ) 5		<b>d</b> ) 243		<b>d)</b> 81	
	0		1		2
1	keer	1	keer	1	keer
Bereken <sup>4</sup> log(16 ·	64)	$\rm Bereken~^3log($	9 · 27)	${\rm Bereken}\ ^3{\rm I}$	$og(9 \cdot 27)$
<b>a)</b> 1024		<b>a</b> ) 5		<b>a</b> ) 243	
<b>b)</b> 256		<b>b</b> ) 81		<b>b</b> ) 5	
<b>c)</b> 5		<b>c)</b> 6		<b>c)</b> 81	
<b>d)</b> 6		<b>d)</b> 243		<b>d</b> ) 6	
		•		•	

1	keer	1	keer	1	keer
Bereken ³log(2	27 · 9)	Bereken <sup>3</sup> log(9	9 · 27)	Bereken <sup>4</sup> lo	$g(16 \cdot 64)$
a) 729		<b>a</b> ) 81		<b>a</b> ) 1024	
<b>b)</b> 5		<b>b</b> ) 243		<b>b</b> ) 256	
<b>c)</b> 81		<b>c</b> ) 5		<b>c</b> ) 6	
<b>d</b> ) 6		<b>d</b> ) 6		<b>d</b> ) 5	
	6		7		8
1	keer	1	keer	1	keer
Bereken ³log(2	27 · 9)	$\rm Bereken\ ^2log($	$(2\cdot 4)$	Bereken <sup>4</sup> lo	$g(16 \cdot 64)$
a) 81	,	a) 4		<b>a</b> ) 6	,
<b>b</b> ) 6		<b>b</b> ) 2		<b>b</b> ) 1024	
<b>c)</b> 5		c) 3		c) 256	
<b>d</b> ) 729		d) 32		<b>d)</b> 5	
,		,		,	

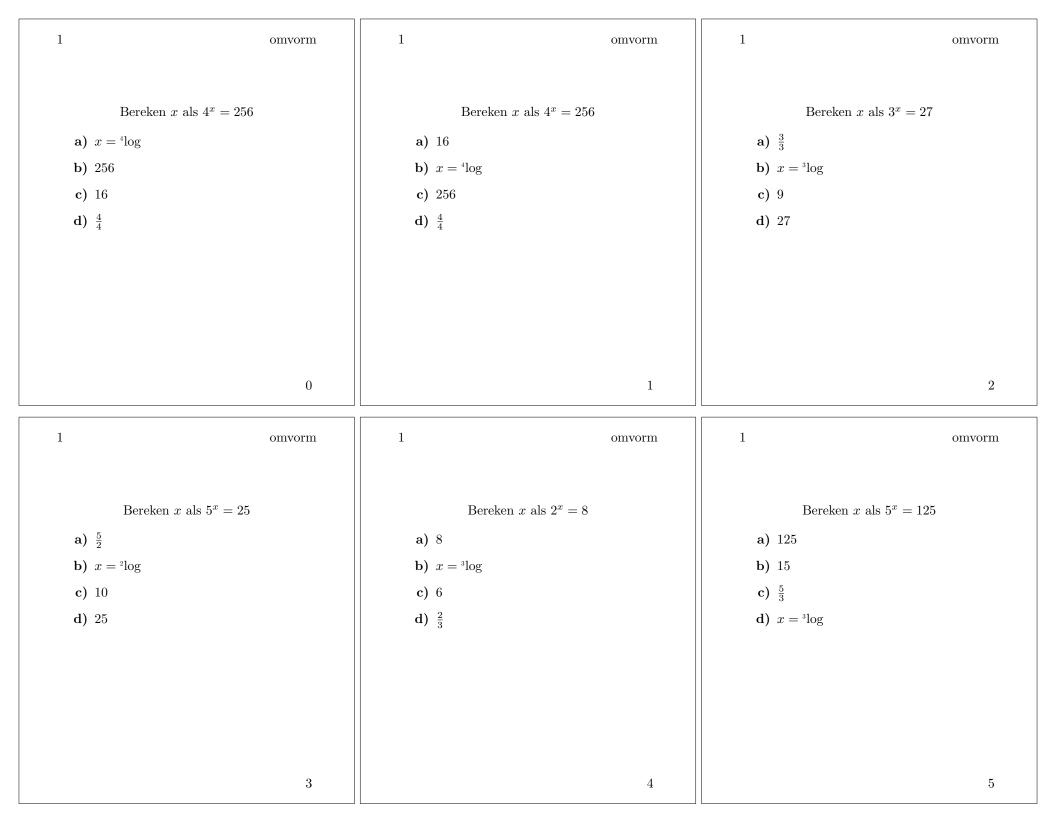




1	macht	1		macht	1	macht
Bereken ${}^4\log(4^{13})$			Bereken ${}^{2}\log(2^{3})$		Bereker	n $^3\mathrm{log}(3^5)$
<b>a</b> ) 52		<b>a</b> ) $\frac{2}{3}$			<b>a)</b> 243	
<b>b)</b> 67108864		<b>b</b> ) 6			<b>b)</b> 15	
<b>c</b> ) $\frac{4}{13}$		<b>c</b> ) 3			<b>c</b> ) 5	
<b>d)</b> 13		<b>d)</b> 8			<b>d</b> ) $\frac{3}{5}$	
	0			1		2
1	macht	1		macht	1	macht
	Bereken ${}^4\log(4^3)$		Bereken $^{3}\log(3^{2})$		Bereken ${}^4\log(4^9)$	
<b>a)</b> $\frac{4}{3}$		<b>a</b> ) 9			<b>a</b> ) $\frac{4}{9}$	
<b>b)</b> 64		<b>b</b> ) $\frac{3}{2}$			<b>b</b> ) 262144	
<b>c)</b> 12		<b>c</b> ) 2			<b>c)</b> 36	
<b>d</b> ) 3		<b>d</b> ) 6			<b>d)</b> 9	

3 4 5

1	macht	1	macht	1	macht
Bereken $3\log(3^8)$		Bereken ³lo	$\log(3^7)$	Bereke	n $^2\mathrm{log}(2^6)$
a) $\frac{3}{8}$		<b>a</b> ) $\frac{3}{7}$		<b>a</b> ) 64	
<b>b)</b> 8		<b>b</b> ) 2187		<b>b</b> ) $\frac{2}{6}$	
<b>c</b> ) 24		<b>c</b> ) 21		<b>c</b> ) 12	
<b>d</b> ) 6561		<b>d</b> ) 7		<b>d</b> ) 6	
	6		7		8
1	macht	1	macht	1	macht
$^{5}\log(5^{1})$		Bereken <sup>5</sup> lo	(54)	Danakas	n $^5\mathrm{log}(5^{14})$
		a) 625	) 		1 log(3 )
<ul><li>a) 5</li><li>b) 1</li></ul>		<b>a)</b> 625 <b>b)</b> 4		<b>a</b> ) $\frac{5}{14}$ <b>b</b> ) 14	
c) 5		c) $\frac{5}{4}$		c) 6103515625	
d) $\frac{5}{1}$		d) 20		d) 70	
u) 1		d) 20		u) 10	



Herleid ${}^4\log(8 \cdot x)$ a) $1.500000 + {}^4\log(x)$ b) $32.000000 + {}^4\log(x)$ c) $1.5000004 \log(x)$		Herleid ${}^{2}\log(4 \cdot x)$ a) $8.000000 + {}^{2}\log(x)$ b) $2.000000^{2}\log(x)$ c) $2.000000 + {}^{2}\log(x)$		Herleid ${}^{2}\log(4 \cdot x)$ a) $8.0000000 + {}^{2}\log(x)$ b) $2.0000000^{2}\log(x)$ c) $2.0000000 + {}^{2}\log(x)$	
	0		1		2
2	keer	2	keer	2	keer
Herleid ${}^{4}\log(6 \cdot x)$ a) $24.000000 + {}^{4}\log(x)$ b) $1.292481 + {}^{4}\log(x)$ c) $1.292481{}^{4}\log(x)$		Herleid ${}^{4}\log(64 \cdot x)$ a) $3.000000 + {}^{4}\log(x)$ b) $3.0000004\log(x)$ c) $256.000000 + {}^{4}\log(x)$		Herleid ${}^{4}\log(64 \cdot x)$ a) $3.000000 + {}^{4}\log(x)$ b) $3.0000000{}^{4}\log(x)$ c) $256.000000 + {}^{4}\log(x)$	
	3		4		5

keer

keer

2

keer

2	keer	2	keer	2	keer
Herleid ${}^2{\log}(2x) + {}^2{\log}(7)$ tot	t één logaritme	$ ext{Herleid } {}^2 ext{log}(2x) + {}^2 ext{log}(5)  ext{ tot}$	één logaritme	Herleid ${}^4\mathrm{log}(4x) + {}^4\mathrm{log}(4x)$	4) tot één logaritme
a) ${}^{2}\log(14x)$		a) ${}^{2}\log(2x+5)$		a) ${}^{4}\log(4x+4)$	i) tot con rogaritine
<b>b)</b> ${}^{2}\log(5x)$		<b>b)</b> ${}^{2}\log(7x)$		<b>b)</b> ${}^{4}\log(8x)$	
c) $\log(9x)$		c) $\log(10x)$		c) $^{4}\log(0x)$	
d) ${}^{2}\log(2x+7)$		d) ${}^{2}\log(7x)$		d) ${}^{4}\log(16x)$	
$\mathbf{u}_{j} = \log(2x + 1)$		$\mathbf{u}_{j} = \log(i\pi)$		$\mathbf{u}_{j}$ $\log(10x)$	
	6		7		8
2	keer	2	keer	2	keer
Herleid ${}^2{\log(3x)} + {}^2{\log(6)}$ tot	t één logaritme	Herleid ${}^4\log(7x) + {}^4\log(5)$ tot	één logaritme	Herleid ${}^3\mathrm{log}(4x) + {}^3\mathrm{log}(7x)$	7) tot één logaritme
<b>a)</b> ${}^{2}\log(18x)$	Ü	<b>a)</b> ${}^{4}\log(12x)$		a) $3\log(28x)$	,
<b>b)</b> ${}^{2}\log(9x)$		<b>b)</b> ${}^{4}\log(2x)$		<b>b)</b> $^{3}\log(11x)$	
c) ${}^{2}\log(3x+6)$		c) ${}^{4}\log(7x+5)$		c) ${}^{3}\log(4x+7)$	
-)8(***   *)		-)8()		-)8( 1 -)	
d) $2\log(5x)$		<b>d</b> ) ${}^{4}\log(35x)$		$\mathbf{d}$ ) $^{3}\log(3x)$	
<b>d)</b> ${}^{2}\log(5x)$		<b>d)</b> ${}^{4}\log(35x)$		$\mathbf{d)}^{-3}\mathrm{log}(3x)$	
$\mathbf{d)}^{-2}\mathrm{log}(5x)$		$\mathbf{d)}^{-4}\mathrm{log}(35x)$		$\mathbf{d)}^{-3}\mathrm{log}(3x)$	
$\mathbf{d)}^{-2}\mathrm{log}(5x)$		$\mathbf{d)}^{-4}\mathrm{log}(35x)$		$\mathbf{d)}^{-3}\mathrm{log}(3x)$	
$\mathbf{d)}^{-2}\mathrm{log}(5x)$		<b>d)</b> ${}^{4}\log(35x)$		$\mathbf{d)}^{-3}\mathrm{log}(3x)$	
$\mathbf{d)}^{-2}\mathrm{log}(5x)$		$\mathbf{d)}^{-4}\mathrm{log}(35x)$		$\mathbf{d)}^{-3}\mathrm{log}(3x)$	

Bereken ${}^{5}\log(\sqrt[3]{5} \cdot 4$ a) 1068.734967 b) 1.333333 c) 21.666667 d) 4.333333	5 <sup>4</sup> )	Bereken <sup>3</sup> log(3  a) 0.000000  b) -16.000000  c) 0.000000  d) 1.000000	$3^4 \cdot \frac{1}{3^4}$ )	Bereken <sup>3</sup> log  a) 2.498050  b) 0.166667  c) 2.500000  d) 0.833333	$(\sqrt[3]{3}\cdot\sqrt[2]{3})$
	0		1		2
2	macht	2	macht	2	macht
Bereken $^6\log(\sqrt[2]{6}$ .	$\frac{1}{6^4}$ )	Bereken ${}^5\mathrm{log}(5^3\cdot\sqrt[4]{5})$		Bereken ${}^5\mathrm{log}(5^4\cdot\sqrt[4]{5})$	
<b>a)</b> -3.500000		a) 186.918598		a) 934.592988	
<b>b)</b> -2.000000		<b>b)</b> 16.250000		<b>b)</b> 21.250000	
c) -21.000000		<b>c)</b> 0.750000		<b>c</b> ) 4.250000	
<b>d)</b> 0.001890		<b>d</b> ) 3.250000		<b>d)</b> 1.000000	
	3		4		5

macht

macht

2

macht

omvorm

3 omvorm

Herleid  $y = 1 + 3\log(7 \cdot x + 6)$ 

a) 
$$x = \frac{3^{7y-6}}{1}$$

**b)** 
$$x = {}^{3}\log(7y - 1) - 6$$

c) 
$$x = \frac{3^{y-1}-6}{7}$$

**d)** 
$$x = \frac{6}{7}3^{y-1}$$

Herleid 
$$y = 13 + {}^{2}\log(6 \cdot x + 0)$$

a) 
$$x = \frac{2^{6y-0}}{13}$$

**b)** 
$$x = {}^{2}\log(6y - 13) - 0$$

c) 
$$x = \frac{0}{6}2^{y-13}$$

**d)** 
$$x = \frac{2^{y-13}-0}{6}$$

Herleid 
$$y = 0 + {}^{4}\log(11 \cdot x + 11)$$

a) 
$$x = \frac{4^{y-0}-11}{11}$$

**b)** 
$$x = {}^{4}\log(11y - 0) - 11$$

c) 
$$x = \frac{4^{11y-11}}{0}$$

**d)** 
$$x = \frac{11}{11}4^{y-0}$$

0

1

omvorm

omvorm

2

3 omvorm

Herleid  $y = 0 + {}^{4}\log(11 \cdot x + 0)$ 

a) 
$$x = \frac{0}{11}4^{y-0}$$

**b)** 
$$x = {}^{4}\log(11y - 0) - 0$$

c) 
$$x = \frac{4^{y-0}-0}{11}$$

**d)** 
$$x = \frac{4^{11y-0}}{0}$$

Herleid  $y = 7 + {}^{4}\log(14 \cdot x + 0)$ 

a) 
$$x = \frac{0}{14}4^{y-7}$$

3

**b)** 
$$x = {}^{4}\log(14y - 7) - 0$$

c) 
$$x = \frac{4^{14y-0}}{7}$$

**d)** 
$$x = \frac{4^{y-7}-0}{14}$$

Herleid  $y = 12 + {}^{2}\log(0 \cdot x + 0)$ 

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

3

**b)** 
$$x = {}^{2}\log(0y - 12) - 0$$

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

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

3

4

Bereken met hoeveel $y = {}^{2}\log($ wordt vermen		Bereken met hoeveel $y = {}^{4}\log$ wordt vermen		Bereken met hoeveel $y = {}^{3}\log y$ wordt verme	
<b>a)</b> keer 3.321928		<b>a)</b> keer 1.000000		<b>a)</b> keer 0.630930	
<b>b)</b> plus 2.000000		<b>b)</b> plus 1.000000		<b>b)</b> keer 0.000000	
c) keer 2.000000		c) plus 0.000000		<b>c)</b> plus 0.000000	
<b>d)</b> plus 3.321928		<b>d)</b> keer 0.000000		<b>d)</b> plus 0.630930	
	0		1		2
3	vermeerder	3	vermeerder	3	vermeerder
Bereken met hoeveel $y = {}^{2}\log y$ wordt vermen		Bereken met hoeveel $y = {}^{3}\log$ wordt vermen		Bereken met hoeveel $y = {}^{4}\log$ wordt verme	
<b>a)</b> keer 0.000000		<b>a)</b> plus 0.000000		<b>a)</b> plus 0.000000	
<b>b)</b> plus 0.000000		<b>b)</b> plus 0.630930		<b>b)</b> keer 0.500000	
<b>c)</b> keer 1.000000		<b>c)</b> keer 0.630930		<b>c)</b> plus 0.500000	
<b>d)</b> plus 1.000000		<b>d)</b> keer 0.000000		<b>d)</b> keer 0.000000	
				·	
	3				5

vermeerder

vermeerder

3

vermeerder

bereken 4 bereken bereken 4 4 Gegeven is dat  ${}^{10}\log = 8$  Bereken  ${}^{2}\log(2 \cdot 3)$ Gegeven is dat  ${}^{10}\log = 8$  Bereken  ${}^{2}\log(2\cdot 3)$ Gegeven is dat  ${}^{10}\log = 8$  Bereken  ${}^{2}\log(2\cdot 3)$ **a)** ? **a**) ? **a**) ? **b)** ? **b)** ? **b)** ? **c)** ? **c)** ? **c)** ? **d)** ? **d)** ? **d)** ? 0 1 2 bereken bereken bereken 4 4 4 Gegeven is dat  ${}^{10}\log = 8$  Bereken  ${}^{2}\log(2\cdot 3)$ Gegeven is dat  ${}^{10}\log = 8$  Bereken  ${}^{2}\log(2\cdot 3)$ Gegeven is dat  ${}^{10}\log = 8$  Bereken  ${}^{2}\log(2\cdot 3)$ **a**) ? **a**) ? **a**) ? **b)** ? **b)** ? **b)** ? **c)** ? **c)** ? **c)** ? **d)** ? **d)** ? **d)** ? 3 5 4