

# LOGARITMOS

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BIOMATEMATICAS

"Logaritmos en los naturales"

1.  $\log_2 4096 = 2^{12} = 12$

4096	2	}	$2^{12}$
2048	2		
1024	2		
512	2		
256	2		
128	2		
64	2		
32	2		
16	2		
8	2		
4	2		
2	2		
1			

2.  $\log_3 2187 = 3^7 = 7$

2187	3	}	$3^7$
729	3		
243	3		
81	3		
27	3		
9	3		
3	3		
1			

3.  $\log_4 1024 = 4^5 = 5$

1024	2	}	$4^5$
512	2		
256	2		
128	2		
64	2		
32	2		
16	2		
8	2		
4	2		
2	2		
1			

4.  $\log_6 1296 = 6^4 = 4$

1296	2	}	$6^4$
648	2		
324	2		
162	2		
81	3		
27	3		
9	3		
3	3		
1			



"Logaritmos"

①

Log<sub>2</sub> 4 = 2

Log<sub>3</sub> 3 = 1

Log<sub>5</sub> 25 = 2

Log<sub>7</sub> 49 = 2

Log<sub>3</sub> 27 = 3

Log<sub>2</sub> 32 = 5

Log<sub>3</sub> 81 = 4

Log<sub>10</sub> 100 = 2

Log<sub>5</sub> 125 = 3

Log<sub>10</sub> 1000 = 3

Log<sub>45</sub> 45 = 1

Log<sub>267</sub> 1 = 0

②

Log<sub>2</sub> 32 + Log<sub>3</sub> 81 + Log<sub>7</sub> 49

5 + 4 - 2 = 7

5 Log<sub>2</sub> 2 + 7 Log<sub>3</sub> 27 - 2 Log<sub>5</sub> 25

5(1) + 7(3) - 2(2) =

5 + 21 - 4 = 22

2 Log 100 - 4 Log<sub>2</sub> 32 - 3 Log<sub>15</sub> 1

2(2) - 4(5) - 3(0) =

4 - 20 - 0 = -16

③

Log<sub>7</sub> (1/7) = -1

Log<sub>8</sub> (1/8) = -1

Log<sub>17</sub> (1/17) = -1

Log<sub>10</sub> (1/10) = -1

Log<sub>2</sub> (1/32) = -5

Log<sub>3</sub> (1/81) = -4

Log<sub>7</sub> (1/49) = -2

Log<sub>5</sub> (1/125) = -3

Log<sub>4</sub> (1/64) = -3

Log<sub>6</sub> (1/36) = -2

Log<sub>9</sub> (1/729) = -3

Log<sub>10</sub> (1/10000) = -4

④

Log (1/2) 64 = -6

Log (1/5) 25 = -2

Log (1/3) 27 = -3

Log (1/10) 100 = -2

2 log<sub>5</sub> (1/25) - 4 log<sub>2</sub> (1/16) + 3 log<sub>3</sub> (1/27)

2(-2) - 4(-4) + 3(-3)

= -4 + 16 + 9

= -4 + 25 = 21