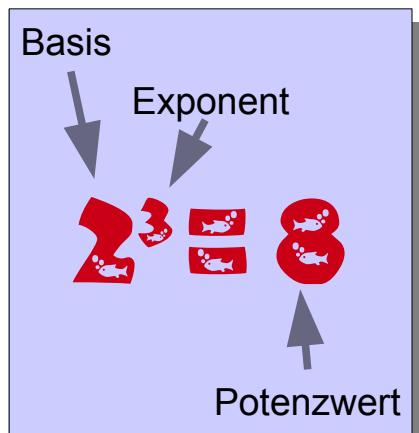


HÖHERE GLEICHUNGEN

$$2^3 = 8$$

$$\sqrt[3]{8} = 2$$

$$\log_2 8 = 3$$

Potenzgleichungen

(x steht in der Basis)

1.

- a) $x^4 = 625$
 b) $x^5 + 1024 = 0$
 c) $2x^3 - 0,25 = 0$
 d) $87 + x^5 = 93$
 e) $5x^3 - 20 = 7 - 3x^3$

- f) $x^{-1} = 0,01$
 g) $x^{-4} = 1296$
 h) $x^{\frac{1}{2}} = 11$
 i) $x^{\frac{2}{3}} - 3 = 0$

A

T8

Lösungsmengen:

{-5,2; 5,2}	{-5; 5}	{-4}	{ $\frac{1}{6}$ }	{ $\frac{1}{2}$ }	{1,43}	{1,5}	{100}	{121}	
-------------	---------	------	-------------------	-------------------	--------	-------	-------	-------	--

Exponentialgleichungen

(x steht im Exponenten)

2.

- a) $10^x = 1000000$
 b) $4^x = 128$
 c) $1,45^x = 1$
 d) $3^x = 0$
 e) $2,4^x = 3,9$

- f) $0,5^x = \frac{1}{128}$
 g) $50 \cdot 5^x = 2$
 h) $\frac{2^x}{3} = \frac{4}{9}$
 i) $7,2^x = 7,2$

A, M

T9

Lösungsmengen:

{}	{-2}	{0}	{1}	{1,55}	{2}	{3,5}	{6}	{7}	
----	------	-----	-----	--------	-----	-------	-----	-----	--