

# Addition und Subtraktion von Termen

<b>Addition und Subtraktion von einfachen Termen</b>	
$a + a + a =$	$20m - 13m =$
$b + a + b + a + b + a + b =$	$4x - 12x =$
$a + a^2 + a + a^2 + a =$	$12a^2 - 5a - 7a^2 =$
$m + 3 + 2m + 5 =$	$-3m + 5m =$
$2c + 3c + 25 + c + 25 =$	$-x^2 - 4x - 12x^2 + 6x =$
$3x + 12 + 3y + 12 + 3y + x =$	$rs - 3rs + rs =$
$4a + a^3 + 3a^2 + 5a^3 + 2a + 3a^2 =$	$12x + 31 - 23 - 9x =$
$12x^2y + 3xy^2 + 3x^2y + 2xy^2 =$	$x - 3y - 5x =$
$3,5m + 2,6n + 5,3n + 3,7m =$	$25 + 20x - 12 - 12x =$
$10x + 1y + 10,1y + 1,1x =$	$13m^2 - 13m - 12m^2 - 12m =$
<b>etwas schwierigere Aufgaben</b>	
$3a - 12b - 14a + 5b =$	
$26x^2 + 12x - 31x - 12x^2 =$	
$-41m - 24n + 39m - 24n + 9m =$	
$12a^2b - 36ab^2 - 24a^2b - 12ab^2 + 12a^2b =$	
$-5x - 13x^2 + 17x - 12x - 7x^2 =$	
$4x^2y - 4xy^2 - 4x^2y - 4xy^2 =$	
$-13a + 24ab - 13b + 11ab + 24a - 12ab - 13b =$	
$3,6m - 2,4n - 2,4m + 4,8n + 2,4m =$	
<b>für "Profis"</b>	
$15x^2 - 30xy - 15x^2 + 30y + 30x =$	
$-ax - bx + ax - 2bx + 3bx =$	
$3a - 2b - [-3b + 4a + (-3b + 4a) - 3a] =$	
$12a - \{ -8a - [ -4a - ( -4a + 8b) + 2b ] + 4b \} + 8b =$	
$3b - [2a + 3b - (2a - 4b)] - [ -3b - (2a - 3b) - 4b ] =$	
$ +12a  -  -12a  =$	
$ -3b  -  +2a  -  -3b  +  -2a  =$	
$ +12x^2  +  -12x  -  -12x^2  -  +12x  =$	

## Lösung

 – Addition und Subtraktion von Termen

<b>Addition und Subtraktion von einfachen Termen</b>	
$a + a + a = 3a$	$20m - 13m = 7m$
$b + a + b + a + b + a + b = 3a + 4b$	$4x - 12x = -8x$
$a + a^2 + a + a^2 + a = 2a^2 + 3a$	$12a^2 - 5a - 7a^2 = 5a^2 - 5a$
$m + 3 + 2m + 5 = 3m + 8$	$-3m + 5m = 2m$
$2c + 3c + 25 + c + 25 = 6c + 50$	$-x^2 - 4x - 12x^2 + 6x = -13x^2 + 2x$
$3x + 12 + 3y + 12 + 3y + x = 4x + 6y + 24$	$rs - 3rs + rs = -rs$
$4a + a^3 + 3a^2 + 5a^3 + 2a + 3a^2 = 6a^3 + 6a^2 + 6a$	$12x + 31 - 23 - 9x = 3x + 8$
$12x^2y + 3xy^2 + 3x^2y + 2xy^2 = 15x^2y + 5xy^2$	$x - 3y - 5x = -4x - 3y$
$3,5m + 2,6n + 5,3n + 3,7m = 7,2m + 7,9n$	$25 + 20x - 12 - 12x = 8x + 13$
$10x + 1y + 10,1y + 1,1x = 11,1x + 11,1y$	$13m^2 - 13m - 12m^2 - 12m = m^2 - 25m$
<b>etwas schwierigere Aufgaben</b>	
$3a - 12b - 14a + 5b = -11a - 7b$	
$26x^2 + 12x - 31x - 12x^2 = 14x^2 - 19x$	
$-41m - 24n + 39m - 24n + 9m = 7m - 48n$	
$12a^2b - 36ab^2 - 24a^2b - 12ab^2 + 12a^2b = -48ab^2$	
$-5x - 13x^2 + 17x - 12x - 7x^2 = -20x^2$	
$4x^2y - 4xy^2 - 4x^2y - 4xy^2 = -8xy^2$	
$-13a + 24ab - 13b + 11ab + 24a - 12ab - 13b = 11a + 23ab - 26b$	
$3,6m - 2,4n - 2,4m + 4,8n + 2,4m = 3,6m + 2,4n$	
<b>für "Profis"</b>	
$15x^2 - 30xy - 15x^2 + 30y + 30x = 30x - 30xy + 30y$	
$-ax - bx + ax - 2bx + 3bx = 0$	
$3a - 2b - [-3b + 4a + (-3b + 4a) - 3a] = -2a + 4b$	
$12a - \{-8a - [-4a - (-4a + 8b) + 2b] + 4b\} + 8b = 20a - 2b$	
$3b - [2a + 3b - (2a - 4b)] - [-3b - (2a - 3b) - 4b] = 2a$	
$ +12a  -  -12a  = 12a - 12a = 0$	
$ -3b  -  +2a  -  -3b  +  -2a  = 3b - 2a - 3b + 2a = 0$	
$ +12x^2  +  -12x  -  -12x^2  -  +12x  = 12x^2 + 12x - 12x^2 - 12x = 0$	