

Espressioni con le potenze. Livello base. Complete di soluzione guidata.

Solved expressions with raise to a power

Potencias y expresiones - Exercices de calcul et expression avec des puissances

- |     |   |                                   |
|-----|---|-----------------------------------|
| 1.  | $2^3 + 2^2 \cdot 5 - 2 \cdot 2^2 + 14 : 2$  | [27]<br><a href="#">soluzione</a> |
| 2.  | $3^3 : 3 + 6^2 : 3 + 2^3 \cdot 2 - 14 : 2 \cdot 5 - 2^0$                          | [1]<br><a href="#">soluzione</a>  |
| 3.  | $3^2 + 2^3 - 3 \cdot 2 + 4^2 : 2 - 8$   | [11]<br><a href="#">soluzione</a> |
| 4.  | $2^3 + 5^2 - 4^2 + 2^2 - 20 : 2 - 5^0$  | [10]<br><a href="#">soluzione</a> |
| 5.  | $3^3 : 9 + 2^4 : 4 - 3 \cdot 1^5$   | [4]<br><a href="#">soluzione</a>  |
| 6.  | $0^5 : 9 + 4^2 + 3^3 - 5^2 - 2^2 \cdot 2$   | [10]<br><a href="#">soluzione</a> |
| 7.  | $1^5 + (2^2 + 2^4) \cdot 5 - 5^2 \cdot 2^2$                                       | [1]<br><a href="#">soluzione</a>  |
| 8.  | $8^2 - 3^2 \cdot 5 + (2^2 \cdot 3^2 - 4 \cdot 9) : 4^2 + 3^0$                     | [20]<br><a href="#">soluzione</a> |
| 9.  | $(2 \cdot 3) : (3^3 - 2^2 \cdot 5 + 2^3 - 36 : 2^2)$                              | [1]<br><a href="#">soluzione</a>  |
| 10. | $(2 \cdot 3)^2 - 2 \cdot 2^4 + 3^3 : 3^2 - 2^3 : 2 - 2$                           | [1]<br><a href="#">soluzione</a>  |
| 11. | $(6 : 3 + 4 : 2 - 2^2)^3 \cdot [2^2 \cdot 3 : 2 + 7 : 7]$                         | [0]<br><a href="#">soluzione</a>  |
| 12. | $[(5^2 - 24)^3 \cdot 8^2 - (4^2 \cdot 2)] : 2^3$                                  | [4]<br><a href="#">soluzione</a>  |
| 13. | $(3^2 + 2^3) \cdot 3 - 4^2 : (5^2 - 3^2)$   | [50]<br><a href="#">soluzione</a> |
| 14. | $(7 - 5)^2 + (2^3 - 2^2 - 2)^3 - 5 \cdot 2$                                       | [2]<br><a href="#">soluzione</a>  |
| 15. | $[2^2 + 2 \cdot (2^2 \cdot 5 + 3)] : 5^2 - 3^2 : 3^2$                             | [1]<br><a href="#">soluzione</a>  |
| 16. | $2^2 + 3^2 \cdot 5^2 - 3 \cdot 2^4 + 7 \cdot 5^2 - 2^3 \cdot 5^2 - 2^2 \cdot 3^3$ | [48]<br><a href="#">soluzione</a> |
| 17. | $3^2 + 2^2 \cdot [(3 \cdot 2^2 : 3 + 5 \cdot 2^2) : 6 + 1^5]$                     | [29]<br><a href="#">soluzione</a> |
| 18. | $2^2 \cdot [(2^2 \cdot 3 : 3 + 5 \cdot 2^2) : (2 \cdot 3) + 1^3]$                 | [20]<br><a href="#">soluzione</a> |
| 19. | $(7^2 - 2 \cdot 5 + 15 : 3) : 4 + (3 \cdot 2^2 + 3^2 - 4^2)^2$                    | [36]<br><a href="#">soluzione</a> |
| 20. | $10^1 + (2 + 11 - 3^2)^2 - (2^2 + 4^2 + 6)$                                       | [0]<br><a href="#">soluzione</a>  |
| 21. | $5 + (8^2 - 5^1 \cdot 3^2 - 2^3) - 3^3 : (4^2 + 3 - 10)$                          | [13]<br><a href="#">soluzione</a> |
| 22. | $2^3 : 2^2 + 3^2 + 4^2 - 5^2 - 4^0$   | [1]<br><a href="#">soluzione</a>  |
| 23. | $2^2 + 3^2 + 5^2 - 2 \cdot 3 - 2^3 \cdot 4$                                       | [0]<br><a href="#">soluzione</a>  |

24.  $24 : (3 \cdot 2^2) + 2^2 \cdot (3^2 + 3^0 - 2^3)$  [10]  
[soluzione](#)
25.  $(5^2 - 3^2) : 2^2 + 9^0 \cdot 8^2 : 8^1$  [12]  
[soluzione](#)
26.  $5 + 2 \cdot [5 + 2 \cdot (2^2 + 5) : 3 - 3^2] - 2 \cdot 3$  [3]  
[soluzione](#)
27.  $(2^3 + 2^4) : 2 + 13 \cdot 3 - 2^2 \cdot 5$  [31]  
[soluzione](#)
28.  $(5^2 + 3^2 - 1) : 3 + (3^3 + 1) : 7$  [15]  
[soluzione](#)
29.  $(3 \cdot 4 + 2^3 \cdot 2 + 7 \cdot 6) : 10 \cdot 3 - 2^2 \cdot 5$  [1]  
[soluzione](#)
30.  $(1^5 + 1^6 + 1^8 + 1^{10}) \cdot 4 - 2^4$  [0]  
[soluzione](#)
31.  $3^2 + 4^2 + 2 \cdot 3 + (7 + 2) : 9 + (27 - 2) : 5$  [37]  
[soluzione](#)
32.  $81 : 3^2 + 32 : 2^2 + 50 : 5^2 - (4 \cdot 2 - 2^3) : 3$  [19]  
[soluzione](#)
33.  $(3^3 + 3^2 + 3^1 + 3^0 - 10) : 6 + 6^2 : 6$  [11]  
[soluzione](#)
34.  $\{[(2^6 - 2^5 - 2^4 - 2^3) : 4 + 1] \cdot 8 - 24\} + 3$  [3]  
[soluzione](#)
35.  $\{[(2^6 - 2^5 - 2^4 - 2^3) : 2^2 + 1]^3 \cdot 2 - 24\}^2 + 3$  [903]  
[soluzione](#)
36.  $3 \cdot 2 + (2^3 : 2^2 + 3^2 : 3) \cdot 5 - (6 : 2 + 44 : 4) : 7$  [29]  
[soluzione](#)
37.  $(3 \cdot 5 - 2^2 \cdot 2) \cdot 3^2 + 3^3 \cdot 2^2 - 7 \cdot 3^2$  [108]  
[soluzione](#)
38.  $(2^2)^3 + (22 - 5 \cdot 4)^2 + 9^2 - 4^2 \cdot 5$  [69]  
[soluzione](#)
39.  $[(3^4)^3 : 3^{10}]^5 : 3^9 + (5^4)^3 : 5^{10} - 2^2 \cdot 7^1$  [0]  
[soluzione](#)
40.  $1^4 + (21 + 11 - 3^3)^2 - (2^2 + 4^2 + 6)$  [0]  
[soluzione](#)
41.  $(2 \cdot 2^2 \cdot 2^3 \cdot 2^4) : 2^9 + (3^3 \cdot 3^5 \cdot 3^7) : 3^{14}$  [4]  
[soluzione](#)



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## Soluzioni

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$$\begin{aligned}2^3 + 2^2 \cdot 5 - 2 \cdot 2^2 + 14 : 2 &= \\= 8 + 4 \cdot 5 - 2 \cdot 4 + 7 &= \\= 8 + 20 - 8 + 7 &= \\= 28 - 8 + 7 &= \\= 20 + 7 &= \mathbf{27}\end{aligned}$$

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$$\begin{aligned}3^3 : 3 + 6^2 : 3 + 2^3 \cdot 2 - 14 : 2 \cdot 5 - 2^0 &= \\27 : 3 + 36 : 3 + 8 \cdot 2 - 7 \cdot 5 - 1 &= \\= 9 + 12 + 16 - 35 - 1 &= \\= 21 + 16 - 35 - 1 &= \\= 37 - 35 - 1 &= \mathbf{1}\end{aligned}$$

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$$\begin{aligned}3^2 + 2^3 - 3 \cdot 2 + 4^2 : 2 - 8 &= \\= 9 + 8 - 6 + 16 : 2 - 8 &= \\= 9 + 8 - 6 + 8 - 8 &= \\= 9 + 8 - 6 &= \\= 17 - 6 &= \mathbf{11}\end{aligned}$$

$$\begin{aligned}2^3 + 5^2 - 4^2 + 2^2 - 20 : 2 - 5^0 &= \\= 8 + 25 - 16 + 4 - 10 - 1 &= \\= 33 - 16 + 4 - 10 - 1 &= \\= 17 + 4 - 10 - 1 &= \\= 21 - 10 - 1 &= \\= 11 - 1 = \mathbf{10}\end{aligned}$$

$$\begin{aligned}3^3 : 9 + 2^4 : 4 - 3 \cdot 1^5 &= \\= 27 : 9 + 16 : 4 - 3 \cdot 1 &= \\= \mathbf{3} + 4 - \mathbf{3} = \mathbf{4}\end{aligned}$$

$$\begin{aligned}0^5 : 9 + 4^2 + 3^3 - 5^2 - 2^2 \cdot 2 &= \\= 0 : 9 + 16 + 27 - 25 - 4 \cdot 2 &= \\= 16 + 27 - 25 - 8 &= \\= 43 - 25 - 8 &= \\= 18 - 8 = 10\end{aligned}$$

$$\begin{aligned}1^5 + (2^2 + 2^4) \cdot 5 - 5^2 \cdot 2^2 &= \\= 1 + (4 + 16) \cdot 5 - 25 \cdot 4 &= \\= 1 + 20 \cdot 5 - 100 = 1 + \mathbf{100} - \mathbf{100} = 1\end{aligned}$$

$$\begin{aligned}8^2 - 3^2 \cdot 5 + (2^2 \cdot 3^2 - 4 \cdot 9) : 4^2 + 3^0 &= \\= 64 - 9 \cdot 5 + (4 \cdot 9 - 4 \cdot 9) : 16 + 1 &= \\= 64 - 45 + 0 : 16 + 1 &= \\= 19 + 1 = \mathbf{20}\end{aligned}$$

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$$\begin{aligned}(2 \cdot 3) : (3^3 - 2^2 \cdot 5 + 2^3 - 36 : 2^2) &= \\= 6 : (27 - 4 \cdot 5 + 8 - 36 : 4) &= \\= 6 : (27 - 20 + 8 - 9) &= \\= 6 : (7 + 8 - 9) &= \\= 6 : (15 - 9) &= \\= 6 : 6 = 1\end{aligned}$$

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$$\begin{aligned}(2 \cdot 3)^2 - 2 \cdot 2^4 + 3^3 : 3^2 - 2^3 : 2 - 2 &= \\= 6^2 - 2 \cdot 16 + 3^{3-2} - 2^{3-1} - 2 &= \\= 36 - 32 + 3 - 4 - 2 &= \\= 4 + 3 - 4 - 2 &= \\= 7 - 4 - 2 &= \\= 3 - 2 = 1\end{aligned}$$

$$\begin{aligned}(6 : 3 + 4 : 2 - 2^2)^3 \cdot [2^2 \cdot 3 : 2 + 7 : 7] \\ = (2 + 2 - 4)^3 \cdot [4 \cdot 3 \div 2 + 1] = \\ = 0^3 \cdot [12 \div 2 + 1] = 0\end{aligned}$$

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$$\begin{aligned}[(5^2 - 24)^3 \cdot 8^2 - (4^2 \cdot 2)] : 2^3 = \\ = [(25 - 24)^3 \cdot 64 - (16 \cdot 2)] : 8 = \\ = [1^3 \cdot 64 - 32] : 8 = \\ = [64 - 32] : 8 = \\ = 32 : 8 = \mathbf{4}\end{aligned}$$

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$$\begin{aligned}(3^2 + 2^3) \cdot 3 - 4^2 : (5^2 - 3^2) = \\ = (9 + 8) \cdot 3 - 16 : (25 - 9) = \\ = 17 \cdot 3 - 16 : 16 = \\ = 51 - 1 = \mathbf{50}\end{aligned}$$

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$$\begin{aligned}(7 - 5)^2 + (2^3 - 2^2 - 2)^3 - 5 \cdot 2 = \\ = 2^2 + (8 - 4 - 2)^3 - 10 = \\ = 4 + (4 - 2)^3 - 10 = \\ = 4 + 2^3 - 10 = \\ = 4 + 8 - 10 = \\ = 12 - 10 = \mathbf{2}\end{aligned}$$

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$$\begin{aligned} & [2^2 + 2 \cdot (2^2 \cdot 5 + 3)] : 5^2 - 3^2 : 3^2 = \\ & = [4 + 2 \cdot (4 \cdot 5 + 3)] : 25 - 9 : 9 = \\ & = [4 + 2 \cdot (20 + 3)] : 25 - 1 = \\ & = [4 + 2 \cdot 23] : 25 - 1 = \\ & = [4 + 46] : 25 - 1 = \\ & = 50 : 25 - 1 = \\ & = 2 - 1 = 1 \end{aligned}$$

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$$\begin{aligned} & 2^2 + 3^2 \cdot 5^2 - 3 \cdot 2^4 + 7 \cdot 5^2 - 2^3 \cdot 5^2 - 2^2 \cdot 3^3 = \\ & = 4 + 9 \cdot 25 - 3 \cdot 16 + 7 \cdot 25 - 8 \cdot 25 - 4 \cdot 27 = \\ & = 4 + 225 - 48 + 175 - 200 - 108 = \\ & = 229 - 48 + 175 - 200 - 108 = \\ & = 181 + 175 - 200 - 108 = \\ & = 356 - 200 - 108 = \\ & = 156 - 108 = \mathbf{48} \end{aligned}$$

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$$\begin{aligned} & 3^2 + 2^2 \cdot [(3 \cdot 2^2 : 3 + 5 \cdot 2^2) : 6 + 1^5] = \\ & = 9 + 4 \cdot [(3 \cdot 4 : 3 + 5 \cdot 4) : 6 + 1] = \\ & = 9 + 4 \cdot [(12 : 3 + 20) : 6 + 1] = \\ & = 9 + 4 \cdot [(4 + 20) : 6 + 1] = \\ & = 9 + 4 \cdot [24 : 6 + 1] = \\ & = 9 + 4 \cdot [4 + 1] = \\ & = 9 + 4 \cdot 5 = \\ & = 9 + 20 = 29 \end{aligned}$$

$$\begin{aligned} & 2^2 \cdot [(2^2 \cdot 3 : 3 + 5 \cdot 2^2) : (2 \cdot 3) + 1^3] = \\ & = 4 \cdot [(4 \cdot 3 : 3 + 5 \cdot 4) : 6 + 1] = \\ & = 4 \cdot [(12 : 3 + 20) : 6 + 1] = \\ & = 4 \cdot [(4 + 20) : 6 + 1] = \\ & = 4 \cdot [24 : 6 + 1] = \\ & = 4 \cdot [4 + 1] = \\ & = 4 \cdot 5 = \mathbf{20} \end{aligned}$$

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$$\begin{aligned} & (7^2 - 2 \cdot 5 + 15 : 3) : 4 + (3 \cdot 2^2 + 3^2 - 4^2)^2 \\ & = (49 - 10 + 5) : 4 + (3 \cdot 4 + 9 - 16)^2 = \\ & = (39 + 5) : 4 + (12 + 9 - 16)^2 = \\ & = 44 : 4 + (21 - 16)^2 = \\ & = 11 + 5^2 = \\ & = 11 + 25 = \mathbf{36} \end{aligned}$$

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$$\begin{aligned} & 10^1 + (2 + 11 - 3^2)^2 - (2^2 + 4^2 + 6) \\ & = 10 + (2 + 11 - 9)^2 - (4 + 16 + 6) = \\ & = 10 + 4^2 - 26 = \\ & = 10 + 16 - 26 = \\ & = 26 - 26 = \mathbf{0} \end{aligned}$$



$$\begin{aligned} & 5 + (8^2 - 5^1 \cdot 3^2 - 2^3) - 3^3 : (4^2 + 3 - 10) = \\ & = 5 + (64 - 5 \cdot 9 - 8) - 27 : (16 + 3 - 10) = \\ & = 5 + (64 - 45 - 8) - 27 : (19 - 10) = \\ & = 5 + (19 - 8) - 27 : 9 = \\ & = 5 + 11 - 3 = \mathbf{13} \end{aligned}$$

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$$\begin{aligned} & 2^3 : 2^2 + 3^2 + 4^2 - 5^2 - 4^0 = \\ & = 2^{3-2} + 3^2 + 4^2 - 5^2 - 4^0 = \\ & = 2 + 9 + 16 - 25 - 1 = \\ & = 11 + 16 - 25 - 1 = \\ & = 27 - 25 - 1 = \\ & = 2 - 1 = \mathbf{1} \end{aligned}$$

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$$\begin{aligned} & 2^2 + 3^2 + 5^2 - 2 \cdot 3 - 2^3 \cdot 4 = \\ & = 4 + 9 + 25 - 6 - 8 \cdot 4 = \\ & = 13 + 25 - 6 - 32 = \\ & = 38 - 6 - 32 = \\ & = 32 - 32 = \mathbf{0} \end{aligned}$$

$$\begin{aligned}24 : (3 \cdot 2^2) + 2^2 \cdot (3^2 + 3^0 - 2^3) &= \\= 24 : (3 \cdot 4) + 4 \cdot (9 + 1 - 8) &= \\= 24 : 12 + 4 \cdot (10 - 8) &= \\= 2 + 4 \cdot 2 &= \\= 2 + 8 &= \mathbf{10}\end{aligned}$$

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$$\begin{aligned}(5^2 - 3^2) : 2^2 + 9^0 \cdot 8^2 : 8^1 &= \\= (25 - 9) : 4 + 1 \cdot 8^1 &= \\= 16 : 4 + 1 \cdot 8 &= \\= 4 + 1 \cdot 8 &= \\= 4 + 8 &= \mathbf{12}\end{aligned}$$

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$$\begin{aligned}5 + 2 \cdot [5 + 2 \cdot (2^2 + 5) : 3 - 3^2] - 2 \cdot 3 &= \\= 5 + 2 \cdot [5 + 2 \cdot (4 + 5) : 3 - 9] - 6 &= \\= 5 + 2 \cdot [5 + 2 \cdot 9 : 3 - 9] - 6 &= \\= 5 + 2 \cdot [5 + 18 : 3 - 9] - 6 &= \\= 5 + 2 \cdot [5 + 6 - 9] - 6 &= \\= 5 + 2 \cdot [11 - 9] - 6 &= \\= 5 + 2 \cdot 2 - 6 &= \\= 5 + 4 - 6 &= 9 - 6 = \mathbf{3}\end{aligned}$$

$$\begin{aligned}(2^3 + 2^4) : 2 + 13 \cdot 3 - 2^2 \cdot 5 &= \\= (8 + 16) : 2 + 39 - 4 \cdot 5 &= \\= 24 : 2 + 39 - 20 &= \\= 12 + 39 - 20 &= \\= 51 - 20 &= \mathbf{31}\end{aligned}$$

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$$\begin{aligned}(5^2 + 3^2 - 1) : 3 + (3^3 + 1) : 7 &= \\= (25 + 9 - 1) : 3 + (27 + 1) : 7 &= \\= (34 - 1) : 3 + 28 : 7 &= \\= 33 : 3 + 4 &= \\= 11 + 4 &= \mathbf{15}\end{aligned}$$

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$$\begin{aligned}(3 \cdot 4 + 2^3 \cdot 2 + 7 \cdot 6) : 10 \cdot 3 - 2^2 \cdot 5 &= \\= (12 + 8 \cdot 2 + 42) : 10 \cdot 3 - 4 \cdot 5 &= \\= (12 + 16 + 42) : 10 \cdot 3 - 20 &= \\= (28 + 42) : 10 \cdot 3 - 20 &= \\= 70 : 10 \cdot 3 - 20 &= \\= 7 \cdot 3 - 20 &= \\= 21 - 20 &= \mathbf{1}\end{aligned}$$

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$$\begin{aligned}(1^5 + 1^6 + 1^8 + 1^{10}) \cdot 4 - 2^4 &= \\= (1 + 1 + 1 + 1) \cdot 4 - 16 &= \\= 4 \cdot 4 - 16 &= \\= 16 - 16 &= \mathbf{0}\end{aligned}$$

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$$\begin{aligned} & 3^2 + 4^2 + 2 \cdot 3 + (7 + 2) : 9 + (27 - 2) : 5 = \\ & = 9 + 16 + 6 + 9 : 9 + 25 : 5 = \\ & = 25 + 6 + 1 + 5 = \\ & = 32 + 5 = \mathbf{37} \end{aligned}$$

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$$\begin{aligned} & 81 : 3^2 + 32 : 2^2 + 50 : 5^2 - (4 \cdot 2 - 2^3) : 3 = \\ & = 81 : 9 + 32 : 4 + 50 : 25 - (8 - 8) : 3 = \\ & = 9 + 8 + 2 = \\ & = 17 + 2 = \mathbf{19} \end{aligned}$$

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$$\begin{aligned} & (3^3 + 3^2 + 3^1 + 3^0 - 10) : 6 + 6^2 : 6 = \\ & = (27 + 9 + 3 + 1 - 10) : 6 + 6 = \\ & = (36 + 3 + 1 - 10) : 6 + 6 = \\ & = 30 : 6 + 6 = \\ & = 5 + 6 = \mathbf{11} \end{aligned}$$

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$$\begin{aligned} & \{[(2^6 - 2^5 - 2^4 - 2^3) : 4 + 1] \cdot 8 - 24\} + 3 = \\ & = \{[(64 - 32 - 16 - 8) : 4 + 1] \cdot 8 - 24\} + 3 = \\ & = \{[8 : 4 + 1] \cdot 2 - 24\} + 3 = \\ & = \{3 \cdot 8 - 24\} + 3 = \\ & = \{24 - 24\} + 3 = \\ & = 0 + 3 = \mathbf{3} \end{aligned}$$

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$$\begin{aligned} & \{[(2^6 - 2^5 - 2^4 - 2^3) : 2^2 + 1]^3 \cdot 2 - 24\}^2 + 3 = \\ & = \{[(64 - 32 - 16 - 8) : 4 + 1]^3 \cdot 2 - 24\}^2 + 3 = \\ & = \{[(8) : 4 + 1]^3 \cdot 2 - 24\}^2 + 3 = \\ & = \{3^3 \cdot 2 - 24\}^2 + 3 = \\ & = \{27 \cdot 2 - 24\}^2 + 3 = \\ & = \{30\}^2 + 3 = \\ & = 900 + 3 = \mathbf{903} \end{aligned}$$

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$$\begin{aligned} & 3 \cdot 2 + (2^3 : 2^2 + 3^2 : 3) \cdot 5 - (6 : 2 + 44 : 4) : 7 = \\ & = 3 \cdot 2 + (2 + 9 : 3) \cdot 5 - (3 + 11) : 7 = \\ & = 6 + (2 + 3) \cdot 5 - 14 : 7 = \\ & = 6 + 5 \cdot 5 - 2 = \\ & = 6 + 25 - 2 = \\ & = 31 - 2 = \mathbf{29} \end{aligned}$$

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$$\begin{aligned} & (3 \cdot 5 - 2^2 \cdot 2) \cdot 3^2 + 3^3 \cdot 2^2 - 7 \cdot 3^2 = \\ & = (15 - 2^3) \cdot 9 + 27 \cdot 4 - 7 \cdot 9 = \\ & = (15 - 8) \cdot 9 + 108 - 56 = \\ & = 7 \cdot 9 + 108 - 56 = \\ & = 56 + 108 - 56 = \mathbf{108} \end{aligned}$$


$$\begin{aligned}(2^2)^3 + (22 - 5 \cdot 4)^2 + 9^2 - 4^2 \cdot 5 &= \\= 2^6 + (22 - 20)^2 + 81 - 16 \cdot 5 &= \\= 64 + 2^2 + 81 - 80 &= \\= 64 + 4 + 81 - 80 &= \\= 68 + 81 - 80 &= \\= 68 + 1 = \mathbf{69}\end{aligned}$$


$$\begin{aligned}(3^5)^3 : 3^{13} + 3^{10} : 3^9 + 9^5 \cdot 9^7 \cdot 9^4 : 9^{16} &= \\= 3^{15} : 3^{13} + 3^1 + 9^{16} : 9^{16} &= \\= 3^2 + 3^1 + 9^0 &= \\= 9 + 3 + 1 = \mathbf{13}\end{aligned}$$


$$\begin{aligned}1^4 + (21 + 11 - 3^3)^2 - (2^2 + 4^2 + 6) &= \\= 1 + (21 + 11 - 27)^2 - (4 + 16 + 6) &= \\= 1 + (32 - 27)^2 - (20 + 6) &= \\= 1 + 5^2 - 26 &= \\= 1 + 25 - 26 &= \\= 26 - 26 = \mathbf{0}\end{aligned}$$


$$\begin{aligned} & (2 \cdot 2^2 \cdot 2^3 \cdot 2^4) : 2^9 + (3^3 \cdot 3^5 \cdot 3^7) : 3^{14} = \\ & = (2^{1+2+3+4}) : 2^9 + (3^{3+5+7}) : 3^{14} = \\ & = 2^9 : 2^9 + 3^{15} : 3^{14} = \\ & = 1 + 3^{15-14} = \\ & = 1 + 3^1 = \\ & = 1 + 3 = \mathbf{[4]} \end{aligned}$$

## **Keywords**

 *Matematica, Aritmetica, espressioni, addizioni, sottrazioni, moltiplicazioni, divisioni, elevamento a potenza, base, esponente, potenza, proprietà delle potenze*

 *Math, Arithmetic, Expression, Arithmetic Operations, Raise to a Power, base, exponent, power, Solved expressions with raise to a power*

 *Matemática, Aritmética, potencia, expresiones, potencias, propiedades de las potencias, Potencias y expresiones,*

 *Mathématique, Arithmétique, Expression, Exercices de calcul et expression avec des puissances, propriété des puissances*

 *Mathematik, Arithmetik, Potenz, Rechenregeln, Allgemeinere Basen, Allgemeinere Exponenten*