

Halla el factor común de los siguientes ejercicios:

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|--|---|
| 1. $6x - 12 =$   | 2. $4x - 8y =$                                    |
| 3. $24a - 12ab =$  | 4. $10x - 15x^2 =$                                |
| 5. $14m^2n + 7mn =$  | 6. $4m^2 - 20am =$                                |
| 7. $8a^3 - 6a^2 =$   | 8. $ax + bx + cx =$                               |
| 9. $b^4 - b^3 =$   | 10. $4a^3bx - 4bx =$                              |
| 11. $14a - 21b + 35 =$   | 12. $3ab + 6ac - 9ad =$                           |
| 13. $20x - 12xy + 4xz =$   | 14. $6x^4 - 30x^3 + 2x^2 =$                       |
| 15. $10x^2y - 15xy^2 + 25xy =$   | 16. $12m^2n + 24m^3n^2 - 36m^4n^3 =$              |
| 17. $2x^2 + 6x + 8x^3 - 12x^4 =$   | 18. $10p^2q^3 + 14p^3q^2 - 18p^4q^3 - 16p^5q^4 =$ |
| 19. $m^3n^2p^4 + m^4n^3p^5 - m^6n^4p^4 + m^2n^4p^3 =$                                  |   |
| 20. $\frac{3}{4}x^2y - \frac{8}{9}xy^2 =$  |   |
| 21. $\frac{1}{2}a^2b^3 + \frac{1}{4}a^3b^4 - \frac{1}{8}a^2b^5 + \frac{1}{16}a^4b^2 =$ |   |
| 22. $\frac{4}{35}a^2b - \frac{12}{5}ab + \frac{8}{15}a^2b^3 - \frac{16}{25}a^3b =$     |   |

Desarrolla las operaciones y encuentra el factor común.

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| 23. $a(x + 1) + b(x + 1) =$       | 24. $m(2a + b) + p(2a + b) =$             |
| 25. $x^2(p + q) + y^2(p + q) =$   | 26. $(a^2 + 1) - b(a^2 + 1) =$            |
| 27. $(1 - x) + 5c(1 - x) =$       | 28. $a(2 + x) - (2 + x) =$                |
| 29. $(x + y)(n + 1) - 3(n + 1) =$ | 30. $(a + 1)(a - 1) - 2(a - 1) =$         |
| 31. $(a(a + b) - b(a + b)) =$     | 32. $(2x + 3)(3 - r) - (2x - 5)(3 - r) =$ |

Agrupa por su factor común.

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|---|-------------------------------|
| 33. $a^2 + ab + ax + bx =$<br><br>$a(a+x) + b(a+x)$<br>$(a + b)(a+x)$                 | 34. $ab + 3a + 2b + 6 =$      |
| 35. $ab - 2a - 5b + 10 =$   | 36. $2ab + 2a - b - 1 =$      |
| 37. $am - bm + an - bn =$   | 38. $3x^3 - 9ax^2 - x + 3a =$ |
| 39. $3x^2 - 3bx + xy - by =$  | 40. $6ab + 4a - 15b - 10 =$   |
| 41. $3a - b^2 + 2b^2x - 6ax =$  | 42. $a^3 + a^2 + a + 1 =$     |
| 43. $ac - a - bc + b + c^2 - c =$   |                               |
| 44. $6ac - 4ad - 9bc + 6bd + 15c^2 - 10cd =$  |                               |
| 45. $ax - ay - bx + by - cx + cy =$   |                               |
| 46. $3am - 8bp - 2bm + 12ap =$  |                               |
| 47. $18x - 12 - 3xy + 2y + 15xz - 10z =$  |                               |
| 48. $\frac{15}{4}x^2 - \frac{21}{4}xz - \frac{10}{3}xy + \frac{143}{3}yz + 5x - 7z =$ |                               |
| 49. $\frac{2}{3}am - \frac{8}{3}am - \frac{4}{5}bm + \frac{16}{5}bn =$                |                               |

Factorización de trinomios:

|                            |                        |
|----------------------------|------------------------|
| 50. $x^2 + 4x + 3 =$       | 51. $a^2 + 7a + 10 =$  |
| 52. $b^2 + 8b + 15 =$      | 53. $x^2 - x - 2 =$    |
| 54. $r^2 - 12r + 27 =$     | 55. $s^2 - 14s + 33 =$ |
| 56. $h^2 - 27h + 50 =$     | 57. $y^2 - 3y - 4 =$   |
| 58. $x^2 + 14xy + 24y^2 =$ | 59. $m^2 + 19m + 48 =$ |
| 60. $x^2 + 5x + 4 =$       | 61. $x^2 - 12x + 35 =$ |

|                            |                             |
|----------------------------|-----------------------------|
| 62. $5x^2 + 11x + 2 =$     | 63. $3a^2 + 10ab + 7b^2 =$  |
| 64. $4x^2 + 7x + 3 =$      | 65. $4h^2 + 5h + 1 =$       |
| 66. $5 + 7b + 2b^2 =$      | 67. $7x^2 - 15x + 2 =$      |
| 68. $5c^2 + 11cd + 2d^2 =$ | 69. $2x^2 + 5x - 12 =$      |
| 70. $6x^2 + 7x - 5 =$      | 71. $6a^2 + 23ab - 4b^2 =$  |
| 72. $3m^2 - 7m - 20 =$     | 73. $8x^2 - 14x + 3 =$      |
| 74. $5x^2 + 3xy - 2y^2 =$  | 75. $7p^2 + 13p - 2 =$      |
| 76. $6a^2 - 5a - 21 =$     | 77. $2x^2 - 17xy + 15y^2 =$ |
| 78. $2a^2 - 13a + 15 =$    |                             |

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| 79. $9a^2 - 25b^2 =$                       | 80. $16x^2 - 100 =$                       |
| 81. $4x^2 - 1 =$                           | 82. $9p^2 - 40q^2 =$                      |
| 83. $36m^2n^2 - 25 =$                      | 84. $49x^2 - 64t^2 =$                     |
| 85. $169m^2 - 196n^2 =$                    | 86. $121x^2 - 144k^2 =$                   |
| 87. $\frac{9}{25}a^2 - \frac{49}{36}b^2 =$ | 88. $\frac{1}{25}x^4 - \frac{9}{16}y^4 =$ |
| 89. $3x^2 - 12 =$                          | 90. $5 - 180f^2 =$                        |
| 91. $8y^2 - 18 =$                          | 92. $3x^2 - 75y^2 =$                      |
| 93. $45m^3n - 20mn =$                      | 94. $2a^5 - 162a^3 =$                     |

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| 95. $b^2 - 12b + 36 =$                  | 96. $25x^2 + 70xy + 49y^2 =$      |
| 97. $m^2 - 2m + 1 =$                    | 98. $x^2 + 10x + 25 =$            |
| 99. $16m^2 - 40mn + 25n^2 =$            | 100. $49x^2 - 14x + 1 =$          |
| 101. $36x^2 - 84xy + 49y^2 =$           | 102. $4a^2 + 4a + 1 =$            |
| 103. $1 + 6a + 9a^2 =$                  | 104. $25m^2 - 70mn + 49n^2 =$     |
| 105. $25a^2c^2 + 20acd + 4d^2 =$        | 106. $289a^2 + 68abc + 4b^2c^2 =$ |
| 107. $16x^6y^8 - 8x^3y^4z^7 + z^{14} =$ |                                   |

|                                 |   |
|---------------------------------|---|
| 108. $2ab + 4a^2b - 6ab^2 =$    | 109. $2xy^2 - 5xy + 10x^2y - 5x^2y^2 =$ |
| 110. $b^2 - 3b - 28 =$          | 111. $a^2 + 6a + 8 =$                   |
| 112. $5a + 25ab =$              | 113. $bx - ab + x^2 - ax =$             |
| 114. $6x^2 - 4ax - 9bx + 6ab =$ | 115. $ax + ay + x + y =$                |
| 116. $8x^2 - 128 =$             | 117. $4 - 12y + 9y^2 =$                 |
| 118. $x^4 - y^2 =$              | 119. $x^2 + 2x + 1 - y^2 =$             |
| 120. $(a + b)^2 - (c + d)^2 =$  | 121. $a^2 + 12ab + 36b^2 =$             |
| 122. $36m^2 - 12mn + n^2 =$     | 123. $x^{16} - y^{16} =$                |