

Talleres del libro Álgebra de Baldor que se debe realizar en clase y en casa y presentar para su calificación.

Factorizar o descomponer en dos factores:		
1. $a^2 + ab$	16. $a^3 + a^2 + a$	30. $25x^7 - 10x^5 + 15x^3 - 5x^2$
2. $b + b^2$	17. $4x^2 - 8x + 2$	31. $x^{15} - x^{12} + 2x^9 - 3x^6$
3. $x^2 + x$	18. $15y^3 + 20y^2 - 5y$	32. $9a^2 - 12ab + 15a^2b^2 - 24ab^3$
4. $3a^3 - a^2$	19. $a^3 - a^2x + ax^2$	33. $16x^3y^2 - 8x^2y - 24x^4y^2 - 40x^2y^3$
5. $x^3 - 4x^4$	20. $2a^2x + 2ax^2 - 3ax$	34. $12m^2n + 24m^3n^2 - 36m^4n^3 + 48m^5n^4$
6. $5m^2 + 15m^3$	21. $x^3 + x^5 - x^7$	35. $100a^2b^3c - 150ab^2c^2 + 50ab^3c^3 - 200abc^2$
7. $ab - bc$	22. $14x^2y^2 - 28x^3 + 56x^4$	36. $x^5 - x^4 + x^3 - x^2 + x$
8. $x^2y + x^2z$	23. $34ax^2 + 51a^2y - 68ay^2$	37. $a^2 - 2a^3 + 3a^4 - 4a^5 + 6a^6$
9. $2a^2x + 6ax^2$	24. $96 - 48mn^2 + 144n^3$	38. $3a^2b + 6ab - 5a^3b^2 + 8a^2bx + 4ab^2m$
10. $8m^2 - 12mn$	25. $a^2b^2c^2 - a^2c^2x^2 + a^2c^2y^2$	39. $a^{20} - a^{16} + a^{12} - a^8 + a^4 - a^2$
11. $9a^3x^2 - 18ax^3$	26. $55m^2n^3x + 110m^2n^3x^2 - 220m^2y^3$	
12. $15c^3d^2 + 60c^2d^3$	27. $93a^3x^2y - 62a^2x^3y^2 - 124a^2x$	
13. $35m^2n^3 - 70m^3$	28. $x - x^2 + x^3 - x^4$	
14. $abc + abc^2$	29. $a^6 - 3a^4 + 8a^3 - 4a^2$	
15. $24a^2xy^2 - 36x^2y^4$		

89

Ejercicio

19. $(x^2 + 2)(m - n) + 2(m - n)$	26. $(a + b - 1)(a^2 + 1) - a^2 - 1$
20. $a(x - 1) - (a + 2)(x - 1)$	27. $(a + b - c)(x - 3) - (b - c - a)(x - 3)$
21. $5x(a^2 + 1) + (x + 1)(a^2 + 1)$	28. $3x(x - 1) - 2y(x - 1) + z(x - 1)$
22. $(a + b)(a - b) - (a - b)(a - b)$	29. $a(n + 1) - b(n + 1) - n - 1$
23. $(m + n)(a - 2) + (m - n)(a - 2)$	30. $x(a + 2) - a - 2 + 3(a + 2)$
24. $(x + m)(x + 1) - (x + 1)(x - n)$	31. $(1 + 3a)(x + 1) - 2a(x + 1) + 3(x + 1)$
25. $(x - 3)(x - 4) + (x - 3)(x + 4)$	32. $(3x + 2)(x + y - z) - (3x + 2) - (x + y - 1)(3x + 2)$

Factorizar o descomponer en dos factores:		
1. $a(x + 1) + b(x + 1)$	7. $x(a + 1) - a - 1$	13. $a^3(a - b + 1) - b^2(a - b + 1)$
2. $x(a + 1) - 3(a + 1)$	8. $a^2 + 1 - b(a^2 + 1)$	14. $4m(a^2 + x - 1) + 3n(x - 1 + a^2)$
3. $2(x - 1) + y(x - 1)$	9. $3x(x - 2) - 2y(x - 2)$	15. $x(2a + b + c) - 2a - b - c$
4. $m(a - b) + (a - b)n$	10. $1 - x + 2a(1 - x)$	16. $(x + y)(n + 1) - 3(n + 1)$
5. $2x(n - 1) - 3y(n - 1)$	11. $4x(m - n) + n - m$	17. $(x + 1)(x - 2) + 3y(x - 2)$
6. $a(n + 2) + n + 2$	12. $-m - n + x(m + n)$	18. $(a + 3)(a + 1) - 4(a + 1)$

Factorizar o descomponer en dos factores:		
1. $a^2 + ab + ax + bx$	6. $x^2 - a^2 + x - a^2x$	11. $4a^3x - 4a^2b + 3bm - 3amx$
2. $am - bm + an - bn$	7. $4a^3 - 1 - a^2 + 4a$	12. $6ax + 3a + 1 + 2x$
3. $ax - 2bx - 2ay + 4by$	8. $x + x^2 - xy^2 - y^2$	13. $3x^3 - 9ax^2 - x + 3a$
4. $a^2x^2 - 3bx^2 + a^2y^2 - 3by^2$	9. $3abx^2 - 2y^2 - 2x^2 + 3aby^2$	14. $2a^2x - 5a^2y + 15by - 6bx$
5. $3m - 2n - 2nx^4 + 3mx^4$	10. $3a - b^2 + 2b^2x - 6ax$	15. $2x^2y + 2xz^2 + y^2z^2 + xy^3$

16. $6m - 9n + 21nx - 14mx$	24. $2am - 2an + 2a - m + n - 1$
17. $n^2x - 5a^2y^2 - n^2y^2 + 5a^2x$	25. $3ax - 2by - 2bx - 6a + 3ay + 4b$
18. $1 + a + 3ab + 3b$	26. $a^3 + a + a^2 + 1 + x^2 + a^2x^2$
19. $4am^3 - 12amn - m^2 + 3n$	27. $3a^3 - 3a^2b + 9ab^2 - a^2 + ab - 3b^2$
20. $20ax - 5bx - 2by + 8ay$	28. $2x^3 - nx^2 + 2xz^2 - nz^2 - 3ny^2 + 6xy^2$
21. $3 - x^2 + 2abx^2 - 6ab$	29. $3x^3 + 2axy + 2ay^2 - 3xy^2 - 2ax^2 - 3x^2y$
22. $a^3 + a^2 + a + 1$	30. $a^2b^3 - n^4 + a^2b^3x^2 - n^4x^2 - 3a^2b^3x + 3n^4x$
23. $3a^2 - 7b^2x + 3ax - 7ab^2$	

Factorizar o descomponer en dos factores:

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| 1. $a^2 - 2ab + b^2$ | 16. $1 + a^{10} - 2a^5$ | 27. $16x^8 - 2x^3y^2 + \frac{y^4}{16}$ |
| 2. $a^2 + 2ab + b^2$ | 17. $49m^6 - 70am^3n^2 + 25a^2n^4$ | 28. $\frac{n^2}{9} + 2mn + 9m^2$ |
| 3. $x^2 - 2x + 1$ | 18. $100x^{10} - 60a^4x^5y^6 + 9a^8y^{12}$ | 29. $a^2 + 2a(a+b) + (a+b)^2$ |
| 4. $y^4 + 1 + 2y^2$ | 19. $121 + 198x^6 + 81x^{12}$ | 30. $4 - 4(1-a) + (1-a)^2$ |
| 5. $a^2 - 10a + 25$ | 20. $a^2 - 24am^2x^2 + 144m^4x^4$ | 31. $4m^2 - 4m(n-m) + (n-m)^2$ |
| 6. $9 - 6x + x^2$ | 21. $16 - 104x^2 + 169x^4$ | 32. $(m-n)^2 + 6(m-n) + 9$ |
| 7. $16 + 40x^2 + 25x^4$ | 22. $400x^{10} + 40x^5 + 1$ | 33. $(a+x)^2 - 2(a+x)(x+y) + (x+y)^2$ |
| 8. $1 + 49a^2 - 14a$ | 23. $\frac{a^2}{4} - ab + b^2$ | 34. $(m+n)^2 - 2(a-m)(m+n) + (a-m)^2$ |
| 9. $36 + 12m^2 + m^4$ | 24. $1 + \frac{2b}{3} + \frac{b^2}{9}$ | 35. $4(1+a)^2 - 4(1+a)(b-1) + (b-1)^2$ |
| 10. $1 - 2a^3 + a^6$ | 25. $a^4 - a^2b^2 + \frac{b^4}{4}$ | 36. $9(x-y)^2 + 12(x-y)(x+y) + 4(x+y)^2$ |
| 11. $a^9 + 18a^4 + 81$ | 26. $\frac{1}{25} + \frac{25x^4}{36} - \frac{x^2}{3}$ | |
| 12. $a^6 - 2a^3b^3 + b^6$ | | |
| 13. $4x^2 - 12xy + 9y^2$ | | |
| 14. $9b^2 - 30a^2b + 25a^4$ | | |
| 15. $1 + 14x^2y + 49x^4y^2$ | | |

Factorizar o descomponer en dos factores:

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| 1. $x^2 - y^2$ | 8. $1 - y^2$ | 15. $a^{10} - 49b^{12}$ |
| 2. $a^2 - 1$ | 9. $4a^2 - 9$ | 16. $25x^2y^4 - 121$ |
| 3. $a^2 - 4$ | 10. $25 - 36x^4$ | 17. $100m^2n^4 - 169y^6$ |
| 4. $9 - b^2$ | 11. $1 - 49a^2b^2$ | 18. $a^2m^4n^8 - 144$ |
| 5. $1 - 4m^2$ | 12. $4x^2 - 81y^4$ | 19. $196x^2y^4 - 225z^{12}$ |
| 6. $16 - n^2$ | 13. $a^2b^6 - c^2$ | 20. $256a^{12} - 289b^4m^{10}$ |
| 7. $a^2 - 25$ | 14. $100 - x^2y^8$ | 21. $1 - 9a^2b^4c^6d^8$ |

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| 22. $361x^{14} - 1$ | 27. $\frac{x^2}{100} - \frac{y^2z^4}{81}$ | 32. $a^{4n} - 225b^4$ |
| 23. $\frac{1}{4} - 9a^2$ | 28. $\frac{x^6}{49} - \frac{4a^{10}}{121}$ | 33. $16x^{6m} - \frac{y^{2n}}{49}$ |
| 24. $1 - \frac{a^2}{25}$ | 29. $100m^2n^4 - \frac{1}{16}x^8$ | 34. $49a^{10n} - \frac{b^{12x}}{81}$ |
| 25. $\frac{1}{16} - \frac{4x^2}{49}$ | 30. $a^{2n} - b^{2n}$ | 35. $a^{2n}b^{4n} - \frac{1}{25}$ |
| 26. $\frac{a^2}{36} - \frac{x^6}{25}$ | 31. $4x^{2n} - \frac{1}{9}$ | 36. $\frac{1}{100} - x^{2n}$ |

Factorizar o descomponer en dos factores:

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|---------------------------------|---|
| 1. $a^2 + 2ab + b^2 - x^2$ | 20. $25 - x^2 - 16y^2 + 8xy$ |
| 2. $x^2 - 2xy + y^2 - m^2$ | 21. $9x^2 - a^2 - 4m^2 + 4am$ |
| 3. $m^2 + 2mn + n^2 - 1$ | 22. $16x^2y^2 + 12ab - 4a^2 - 9b^2$ |
| 4. $a^2 - 2a + 1 - b^2$ | 23. $-a^2 + 25m^2 - 1 - 2a$ |
| 5. $n^2 + 6n + 9 - c^2$ | 24. $49x^4 - 25x^2 - 9y^2 + 30xy$ |
| 6. $a^2 + x^2 + 2ax - 4$ | 25. $a^2 - 2ab + b^2 - c^2 - 2cd - d^2$ |
| 7. $a^2 + 4 - 4a - 9b^2$ | 26. $x^2 + 2xy + y^2 - m^2 + 2mn - n^2$ |
| 8. $x^2 + 4y^2 - 4xy - 1$ | 27. $a^2 + 4b^2 + 4ab - x^2 - 2ax - a^2$ |
| 9. $a^2 - 6ay + 9y^2 - 4x^2$ | 28. $x^2 + 4a^2 - 4ax - y^2 - 9b^2 + 6by$ |
| 10. $4x^2 + 25y^2 - 36 + 20xy$ | 29. $m^2 - x^2 + 9n^2 + 6mn - 4ax - 4a^2$ |
| 11. $9x^2 - 1 + 16a^2 - 24ax$ | 30. $9x^2 + 4y^2 - a^2 - 12xy - 25b^2 - 10ab$ |
| 12. $1 + 64a^2b^2 - x^4 - 16ab$ | 31. $2am - x^2 - 9 + a^2 + m^2 - 6x$ |
| 13. $a^2 - b^2 - 2bc - c^2$ | 32. $x^2 - 9a^4 + 6a^2b + 1 + 2x - b^2$ |
| 14. $1 - a^2 + 2ax - x^2$ | 33. $16a^2 - 1 - 10m + 9x^2 - 24ax - 25m^2$ |
| 15. $m^2 - x^2 - 2xy - y^2$ | 34. $9m^2 - a^2 + 2acd - c^2d^2 + 100 - 60m$ |
| 16. $c^2 - a^2 + 2a - 1$ | 35. $4a^2 - 9x^2 + 49b^2 - 30xy - 25y^2 - 28ab$ |
| 17. $9 - n^2 - 25 - 10n$ | 36. $225a^2 - 169b^2 + 1 + 30a + 26bc - c^2$ |
| 18. $4a^2 - x^2 + 4x - 4$ | 37. $x^2 - y^2 + 4 + 4x - 1 - 2y$ |
| 19. $1 - a^2 - 9n^2 - 6an$ | 38. $a^2 - 16 - x^2 + 36 + 12a - 8x$ |