

| <b>ALGEBRATOR N° 5 (III Bim)</b><br><b>Criterio C</b><br>Ci: Usar lenguaje matemático apropiado (notación, símbolos y terminología) en explicaciones tanto orales como escritas |                                          | score: /10                        |                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------|-----------------------------------------|
| $\left(\frac{2}{7}ab\right)^{\frac{3}{7}} =$                                                                                                                                    | $\sqrt[3]{\left(\frac{2}{7}ab\right)^4}$ | $(x^7-9)(x^7+9)$                  | $x^{49}-81$                             |
|                                                                                                                                                                                 | $\sqrt[7]{\left(\frac{2}{7}ab\right)^3}$ |                                   | $x^{14}-18$                             |
|                                                                                                                                                                                 |                                          |                                   | $x^{14}-81$                             |
| $(x^2-7)^2$                                                                                                                                                                     | $x^4+14x^2+49$                           | $(5x^m)(9x^{4m-1})$               | $45x^{3m-1}$                            |
|                                                                                                                                                                                 | $x^4-14x^2+49$                           |                                   | $45x^{5m-1}$                            |
|                                                                                                                                                                                 | $x^4+14x^2+14$                           |                                   | $14x^{5m}$                              |
| $(0,9x^{2p-9})(2x^9)$                                                                                                                                                           | $1,8x^{2p+1}$                            | $\sqrt[5]{a^{30}b^{51}} =$        | $a^6b^{10}\sqrt[5]{b}$                  |
|                                                                                                                                                                                 | $0,18x^{2p}$                             |                                   | $a^3b^8\sqrt[5]{a^2}$                   |
|                                                                                                                                                                                 | $1,8x^{2p}$                              |                                   | $a^3b^8$                                |
| $(4x+3)^2$                                                                                                                                                                      | $4^2x^2-24x+9$                           | $(7x^{10}-3)^{10}(7x^{10}-3)^5 =$ | $(7x^{10}-3)^{10}$                      |
|                                                                                                                                                                                 | $4^2x^2+24x+9$                           |                                   | $(7x^{10}-3)^{15}$                      |
|                                                                                                                                                                                 | $16x^2+14x+9$                            |                                   | $(7x^{10}-3)^5$                         |
| $\sqrt[9]{\sqrt[9]{\sqrt[9]{x^7}}} =$                                                                                                                                           | $(9z)^3\sqrt{x}$                         | $5x^{-\frac{3}{4}} =$             | $\sqrt[4]{\left(\frac{1}{5x}\right)^3}$ |
|                                                                                                                                                                                 | $27z^3\sqrt{x}$                          |                                   | $5\sqrt[4]{\frac{1}{x^3}}$              |
|                                                                                                                                                                                 | $9z\sqrt{x^3}$                           |                                   |                                         |
| $\left(\frac{4}{11}\right)^x\left(\frac{4}{11}\right)^{4x-3}\left(\frac{4}{11}\right) =$                                                                                        | $\left(\frac{4}{11}\right)^{5x-2}$       | $(x^4y^5-17)(x^4y^5+17)$          | $x^{16}y^{10}-34$                       |
|                                                                                                                                                                                 | $\left(\frac{4}{11}\right)^{5x-3}$       |                                   | $x^{16}y^{25}-17^2$                     |
|                                                                                                                                                                                 |                                          |                                   | $x^8y^{10}-289$                         |
| $\frac{x^{10}y^{-6}}{x^8y} =$                                                                                                                                                   | $x^2y^7$                                 | $(x-10)(x+1)$                     | $x^2-9x-10$                             |
|                                                                                                                                                                                 | $x^2y^6$                                 |                                   | $x^2-10x-1$                             |
|                                                                                                                                                                                 | $x^2y^5$                                 |                                   | $x^2-9x-9$                              |

|                               |                      |                                 |                         |
|-------------------------------|----------------------|---------------------------------|-------------------------|
|                               |                      |                                 |                         |
| $\sqrt[6]{z^4 \sqrt[7]{5}} =$ | $\sqrt[13]{5z^{28}}$ | $\sqrt[9]{\sqrt[7]{5(x-1)}} =$  | $\sqrt[126]{5(x-1)}$    |
|                               | $\sqrt[42]{5z^{28}}$ |                                 | $\sqrt[63]{5(x+1)}$     |
|                               | $\sqrt[54]{5z^{18}}$ |                                 | $\sqrt[63]{x+1}$        |
| $\sqrt{x^5 \sqrt[3]{2}} =$    | $\sqrt[6]{2x^{15}}$  | $\sqrt[q^5]{\sqrt[q^3]{3,7}} =$ | $q^{15}\sqrt[3]{3,7}$   |
|                               | $\sqrt[5]{2x^8}$     |                                 | $q^8\sqrt[3]{3,7}$      |
|                               | $\sqrt[6]{2^{15}x}$  |                                 | $q^1\sqrt[3]{3,7}$      |
| $[ (9,7x^3 - 8)^7 ]^{4m}$     | $(9,7x^3 - 8)^{13m}$ | $x^6 \sqrt[3]{11} =$            | $\sqrt[3]{11x^6}$       |
|                               | $(9,7x^3 - 8)^{11m}$ |                                 | $\sqrt[3]{11 x^{18}}$   |
|                               | $(9,7x^3 - 8)^{28m}$ |                                 | $\sqrt[3]{11^6 x^{18}}$ |

**Importante:** Este documento se elabora sin realizar ninguna operación, esta es su exigencia. Todas las respuestas se conocen o son de cálculo mental.

**No debe exceder el tiempo indicado en aula.**