

| <b>ALGEBRATOR N° 3 (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                                    |                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------|------------------------------------------|
| $(5x + 2)^2$                                                                                                                                                                    | $5^2x^2 - 20x + 4$                       | $(x^2 - 9)(x^2 + 9)$                          | $x^4 - 81$                               |
|                                                                                                                                                                                 | $25x^2 + 7x + 4$                         |                                               | $x^2 - 18$                               |
|                                                                                                                                                                                 | $25x^2 + 20x + 4$                        |                                               | $x^4 - 36$                               |
| $(x^2 - 8)^2$                                                                                                                                                                   | $x^2 - 16x + 64$                         | $(4x^{m-10})(9x^{4m-2})$                      | $13x^{3m-12}$                            |
|                                                                                                                                                                                 | $x^4 - 16x^2 + 64$                       |                                               | $36x^{5m-12}$                            |
|                                                                                                                                                                                 | $x^4 + 10x^2 + 16$                       |                                               | $36x^{3m-8}$                             |
| $(0,6x^{2p+10})(2x^9)$                                                                                                                                                          | $0,8x^{2p+1}$                            | $\sqrt[5]{a^{17}b^{40}} =$                    | $a^{10}b^{35}\sqrt{a^7}$                 |
|                                                                                                                                                                                 | $0,12x^{2p-19}$                          |                                               | $a^3b^8\sqrt[5]{a^2}$                    |
|                                                                                                                                                                                 | $1,2x^{2p+19}$                           |                                               | $a^3b^8$                                 |
| $\left(\frac{2}{7}ab\right)^{\frac{3}{7}} =$                                                                                                                                    | $\sqrt[3]{\left(\frac{2}{7}ab\right)^4}$ | $(9x^3-7)^{10}(9x^3-7) =$                     | $(9x^3-7)^{10}$                          |
|                                                                                                                                                                                 | $\sqrt[7]{\left(\frac{2}{7}ab\right)^3}$ |                                               | $(9x^3-7)^{11}$                          |
|                                                                                                                                                                                 | $\sqrt[7]{\frac{2}{7}a^3b^3}$            |                                               | $(9x^3-7)^{12}$                          |
| $x^{10}\sqrt{5} =$                                                                                                                                                              | $\sqrt{5x^{10}}$                         | $\left(\frac{7y}{12}\right)^{-\frac{3}{4}} =$ | $\left(\sqrt[4]{\frac{7y}{12}}\right)^3$ |
|                                                                                                                                                                                 | $\sqrt{5x^{20}}$                         |                                               | $\left(\sqrt[4]{\frac{12}{7y}}\right)^3$ |
|                                                                                                                                                                                 | $\sqrt{5^2x^{18}}$                       |                                               |                                          |
| $\left(\frac{8}{13}\right)^{x-2} \left(\frac{8}{13}\right)^{4x-1} \left(\frac{8}{13}\right) =$                                                                                  | $\left(\frac{8}{13}\right)^{4x-2}$       | $(x^3y^5-11)(x^3y^5+11)$                      | $x^6y^{10}-0$                            |
|                                                                                                                                                                                 | $\left(\frac{8}{13}\right)^{5x-2}$       |                                               | $x^6y^5-11^2$                            |
|                                                                                                                                                                                 |                                          |                                               | $x^6y^{10}-121$                          |
| $\frac{x^{15}}{x^{-8}} =$                                                                                                                                                       | $x^{-8}$                                 | $(x-4)(x+1)$                                  | $x^2-3x-4$                               |
|                                                                                                                                                                                 | $x^{20}$                                 |                                               | $x^2-5x-4$                               |
|                                                                                                                                                                                 | $x^{23}$                                 |                                               | $x^2-3x-5$                               |

|                               |                      |                                        |                     |
|-------------------------------|----------------------|----------------------------------------|---------------------|
|                               |                      |                                        |                     |
| $\sqrt[6]{z^2} \sqrt[9]{5} =$ | $\sqrt[27]{5z^{18}}$ | $\sqrt[4]{\sqrt[7]{m+1}} =$            | $\sqrt[11]{m+2}$    |
|                               | $\sqrt[54]{5z^{13}}$ |                                        | $\sqrt[56]{m+1}$    |
|                               | $\sqrt[54]{5z^{18}}$ |                                        | $\sqrt[11]{m+1}$    |
| $\sqrt{x^5} \sqrt[3]{2} =$    | $\sqrt[6]{2x^{15}}$  | $\sqrt[m^6]{m^3 \sqrt[3]{33}} =$       | $\sqrt[m^{18}]{33}$ |
|                               | $\sqrt[5]{2x^8}$     |                                        | $\sqrt[m^9]{33}$    |
|                               | $\sqrt[6]{2^{15}x}$  |                                        | $\sqrt[m^3]{33}$    |
| $\{ [(9,7x-8)^6]^m \}^4$      | $(9,7x-8)^{10m}$     | $\sqrt[2z]{\sqrt[2z]{\sqrt[2z]{x}}} =$ | $(2z)^3 \sqrt{x}$   |
|                               | $(9,7x-8)2^m$        |                                        | $\sqrt[12p^3]{x}$   |
|                               | $(9,7x-8)^{24m}$     |                                        | $\sqrt[2z]{x^3}$    |

**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.**