

1.- Calcula:

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|---------------------------------------------------|---------------------------------------------------|
| a) $(3\sqrt{2} + 2\sqrt{3})(\sqrt{2} + \sqrt{3})$ | b) $(\sqrt{2} + 1)(\sqrt{3} - 2)$                 |
| c) $(\sqrt{3} - 2)(4 + \sqrt{3})$                 | d) $(3 - 2\sqrt{2})(3 + 2\sqrt{2})$               |
| e) $(1 - \sqrt{2})(1 + \sqrt{2})$                 | f) $(\sqrt{3} + 2\sqrt{2})(2\sqrt{3} + \sqrt{5})$ |

2.- Calcula:

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|---------------------------------------------------------|--------------------------------------------------|--------------------------------|
| a) $(2\sqrt{2} - 3\sqrt{2})^2$                          | b) $(1 - \sqrt{2})^2$                            | c) $(4\sqrt{2} + 3\sqrt{2})^2$ |
| d) $(\sqrt{2} + 1)^2 - (2\sqrt{2} + 3)^2$               | e) $2(\sqrt{2} - 3)^2 + (\sqrt{2} - \sqrt{3})^2$ |                                |
| f) $\sqrt{2}(\sqrt{2} + \sqrt{3})(\sqrt{2} - \sqrt{3})$ | g) $(\sqrt{3} - 2)^2 - (2\sqrt{2} - 4)^2$        |                                |
| h) $(2\sqrt{2} + 3)^2 - (3\sqrt{2} + 1)^2$              | i) $(\sqrt{3} - 1)^2 + (\sqrt{3} + 2\sqrt{2})^2$ |                                |

3.- Calcula:

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|-------------------------|-------------------------|-----------------------------|
| a) $(\sqrt{3})^4$       | b) $(\sqrt[4]{a})^5$    | c) $(\sqrt[5]{3a})^7$       |
| d) $(\sqrt[7]{2a^5})^6$ | e) $(\sqrt[3]{3a^2})^6$ | f) $(\sqrt[4]{2ab^2c^3})^5$ |

4.- Expresa como un solo radical:

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|--------------------------|------------------------------------|----------------------------------------|
| a) $\sqrt{3\sqrt{4}}$    | b) $\sqrt[6]{\sqrt{2}}$            | c) $\sqrt{\sqrt[3]{\sqrt[5]{3a}}}$     |
| d) $\sqrt{2\sqrt[3]{3}}$ | e) $\sqrt{2\sqrt[3]{2^2}\sqrt{2}}$ | f) $\sqrt[3]{3\sqrt[3]{9}\sqrt[4]{3}}$ |

5.- Introduce factores en los siguientes radicales:

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|----------------------|------------------------|------------------------|
| a) $2\sqrt{3}$       | b) $a^2\sqrt[5]{b}$    | c) $2a\sqrt[3]{b}$     |
| d) $3\sqrt[4]{a^3b}$ | e) $2a^3\sqrt[4]{b^3}$ | f) $5x^2\sqrt[7]{y^4}$ |