

$$9. (x^3 + 5x) \div (x-3)$$

$$x-3 \overline{) x^3 + 0x^2 - 5x - 1}$$

$$x^3 + 3x^2$$

$$-3x^2 - 5x - 1$$

$$-3x^2 + 6x$$

$$x - 1$$

$$x + 3$$

$$R = x^2 + 3x + 1 + \frac{2}{x-3}$$

$$10. (R^4 S^3 T^2 U)^5 = R^{20} S^{15} T^{10} U^5$$

$$11. (-a^3 b^4 c^2 d^5)^6 = a^{18} b^{24} c^{12} d^{30}$$

$$12. (-3x^6 y^3 z^2)(-3x^6 y^3 z^2)$$

$$R = 9x^{12} y^6 z^4$$

$$13. (\frac{2}{5}a^2b - \frac{1}{3}ab - 4)(\frac{2}{3}ab^2)$$

$$R = \frac{2}{5}a^3b^3 - 2a^2b^3 - 6ab^2$$

$$14. (3x^3 + 2y^2)(3x^3 + 2y^2) = 9x^6 + 6x^3y^3$$

$$+ 4y^5$$

$$R = 9x^6 + 12x^3y^3 + 4y^5$$

$$15. (\frac{2}{3}a^3 + \frac{1}{3}b^2)(\frac{2}{3}a^3 + \frac{1}{3}b^2) = \frac{4}{9}a^6 + \frac{2}{3}a^3b^2$$

$$+ \frac{2}{9}a^3b^2 + \frac{1}{9}b^4$$

$$R = \frac{4}{9}a^6 + \frac{2}{3}a^3b^2 + \frac{1}{9}b^4$$

$$1: (2x^4 - 2x^3 + 3x^2 + 5x + 10) \div (x + 2)$$

$$2x^3 - 6x^2 + 13x + 35$$

$$x + 2 \mid 2x^4 - 2x^3 + 3x^2 + 5x + 10$$

$$-2x^4 - 4x^3$$

$$-6x^3 + 3x^2$$

$$9x^3 + 12x^2$$

$$15x^2 + 5x$$

$$-15x^2 + 35x + 10$$

$$35x + 10$$

$$35x - 70$$

$$-70$$

$$R = 2x^3 - 6x^2 + 15x + 35 + \frac{-70}{x+2}$$

$$8(x^{10} - 1024) \div (x + 2)$$

$$x^9 + 2x^8 - 4x^7 + 8x^6 - 16x^5 + 32x^4 - 64x^3 + 128x^2 - 256x + 32$$

$$x + 2 \mid x^{10} + 0x^9 + 0x^8 + 0x^7 + 0x^6 + 0x^5 + 0x^4 + 0x^3 + 0x^2 + 0x + 1024$$

$$-x^{10} + 2x^9$$

$$2x^9 + 0x^8$$

$$-2x^9 - 4x^8 + 0x^7$$

$$4x^8 + 8x^7 + 0x^6$$

$$8x^7 + 0x^6$$

$$-8x^7 - 16x^6$$

$$16x^6 + 0x^5$$

$$32x^5 + 0x^4$$

$$-32x^5 - 64x^4 + 0x^3$$

$$64x^4 + 128x^3 + 0x^2$$

$$-128x^3 - 256x^2$$

$$256x^2 + 0x$$

$$0$$

$$+512x + 1024$$

$$-512x - 1024$$

$$R = x^9 + 2x^8 - 4x^7 + 8x^6 - 16x^5 + 32x^4 - 64x^3 + 128x^2 - 256x + 512$$

$$4. (x^6 + 5x^4 + 3x^2 - 2x) \div (x^2 - x + 3)$$

$$x^2 - x + 3 \overline{) x^6 + 0x^5 + 5x^4 + 0x^3 + 3x^2 - 2x + 0}$$

$$\underline{-x^2 + x - 3}$$

$$x^5 + 2x^4 + 0x^3$$

$$\underline{-x^5 + x^4 - 3x^3}$$

$$3x^4 - 3x^3 + 3x^2$$

$$\underline{-3x^4 + 3x^3 - 9x^2}$$

$$R = x^4 + x^3 + 3x^2 - 6 + \frac{-8+18}{x^2 - x + 3} = \frac{6x^2 - 2x + 10}{x^2 - x + 3}$$

$$\underline{-8x + 18}$$

$$5. (x^4 - 2x^3 - 11x^2 + 30x - 20) \div (x^2 + 3x - 2)$$

Este Problema Es Igual
al núm 3

$$\text{Resultado} = x^2 - 5x + 6 \left(\frac{2x - 8}{x^2 + 3x - 2} \right)$$

$$6. (x^6 + 5x^4 + 3x^2 - 2x) \div (x^2 - x + 3)$$

Este Problema Es Igual
al núm 4

$$\text{Resultado: } x^4 + x^3 + 3x^2 - 6 + \frac{-8+18}{x^2 - x + 3}$$