

$$256a^{12} - 289b^4m^{16} = (16a - 17bm)^2$$

$$16a \quad 17bm$$

$$2x^2 - 3xy - 4x + 6y$$

$$(3xy + 6y) + (2x^2 + 4x)$$

$$3xy(1+2) + 2x(1+2)$$

$$(1+2)(3xy+2x)$$

$$5x(a+1) + (x+1)(-1-a)$$

$$\begin{array}{r|rrrr} 3 & 6 & 13 & 2 & 4 & 2 \\ 1 & 2 & 3 & 2 & 4 & 2 \\ \hline & & & & & \end{array}$$

$$9(x-y)^2 + 12(x-y)(x+y) + 4(x+y)^2$$

$$(3x-3y+4x+4y)^2$$

$$(7x)^2$$

$$a^2x - ax^2 = 2a^2y + 2axy + x^3 - 2x^2y$$

$$a^2(2x+1+y)(a^2-1) + 2axy(1a^2+ax^3y(3-2x))$$

Desarrollo

$$1) 6xy^3 - 9nx^2y^3 + 12nx^2y^3 - 3n^2x^4y^3$$

$$(9nx^2y^3 + 12nx^3y^3) + (6xy^3 - 3n^2x^4y^3)$$

$$3nx^2y^3(3 + 4x) + 3xy^3(2 - n^2x^3)$$

$$5x(a+1) + (x+1)(-1-a)$$

$$5x(a+1-x-1-ax-a)$$

$$5x(a-x-ax)$$

$$5x(a(1-x))$$

$$5ax(1-x)$$

$$\frac{16x^6 + y^4}{16} - 2x^3y^2$$

$$x(16x^5 - 2x^2y + y^4)$$

$$x[(2x)^3 + (-y^2)^3 - 3(2x)(-y^2)(2x + (-y^2))]$$

$$x(2x - y^2)(4x^2 + 2xy^2 + y^4)$$

$$6) -20mx^2y^3 \div 4xy^3$$

$$-5mx^3y^0$$

Parte B

Preimagen = x
Imagen = y

1)

$$1 = 2$$

$$2 =]-3, +\infty[$$

$$3 = -1$$

$$4 = \mathbb{A}$$

2)

$$1 = [-2, +\infty[$$

$$2 = [-3, +\infty[$$

$$3 = 0$$

$$4 = 4$$

3)

$$1 = [1, +\infty[$$

$$2 = [0, +\infty[$$

$$3 = -1$$

$$4 = 0$$

Examen

1)

$$x^2 + \cancel{4x} - \cancel{5x} + x^2 = (x^2 + x^2) + (4x - 5x)$$

$$(x^2 + x^2 - x) \quad 2x^2 - x$$

$$2) \underline{\frac{1}{2}b^2m} - \underline{\frac{3}{5}cn} - \underline{\frac{2}{1}} - \underline{\frac{1}{10}cn} + \underline{\frac{3}{4}b^2m}$$

$$\frac{5}{4}b^2m + \frac{1}{2}cn - \frac{2}{1} + \left(\frac{3}{5}cn - \frac{2}{1} - \frac{1}{10}cn \right)$$

$$3) \underline{\frac{3}{7}a^2} + \underline{\frac{1}{2}ab} - \underline{\frac{3}{5}b^2} + \left(\underline{\frac{5}{14}a^2} - \underline{\frac{1}{2}ab} + \underline{\frac{1}{8}} \right)$$

$$\frac{11}{14}a^2 - \frac{1}{16}ab + \frac{29}{40} \quad \text{(Cambia signo cuando puse la operacion)}$$

$$4) = \frac{2}{3}x^4y \left(-3xy + \frac{4}{5}y - 28x^7y^2 \right)$$

$$2xy + -\frac{8}{15}y - \frac{56}{3}x^3y^2$$

$$5) \left(\frac{1}{2}a - \frac{1}{3}b \right) \left(\frac{5}{6}a^4 - \frac{2}{3}b^4 \right)$$

$$\frac{5a^5}{12} - \frac{ab^4}{3} - \frac{5b^5a^4}{18} + \frac{2b^5}{4}$$