Operaciones basicas con monomios y polinomios

1) Resolver la suma de monomios:

A) $7a + 5ab + 7a = 14a + 5ab$

B) $2a + 7 + 12ab = 2a + 7 + 12ab$

C) $5ab + 2bc + 3ab = 8ab + 2bc$

D) $2a + 4a - 4a = 2a$

E) $\underset{3xa}{3xa} + \underset{4ya}{4ya} - \underset{4za}{4za} + \underset{6xa}{6xa} + \underset{7za}{7za} + \underset{8ya}{8ya} - \underset{9za}{9za} - \underset{19xa}{19xa} = 28xa + 12ya - 6za$

$3xa + 6xa + 19xa = 28xa$

$4ya + 8ya = 12ya$

$-4za + 7za - 9za = -6za$

2) Actividades a realizar parte 2:

A) $2(3x^3 + 4x^2 + 2x - 1)\ 6x^3 + 8x^2 + 4x + 2$

B) $3x^2 \cdot (2x^3 - 3x^2 + 4x - 2)\ 6x^5 - 9x^4 + 12x^3 - 6x^2$

C) $2x(x^4 - 3x^2 + 5x - 1)\ 6x^3 + 18x^2 - 2x$

3) Halle el cociente de las divisiones siguientes:

1) $16x^4 \div 8x^2 =$

$\frac{16x^4}{8x^2} = 2x^2$

2) $24x^6 \div (-4x^3) =$

$\frac{24x^6}{-4x^3} = -6x^3$

3) $(-28x^4y^6) \div (7x^3y^2) =$

$\frac{28x^4y^6}{7x^3y^2} = 4xy^4$

4) $(-45x^5y^6z^3) \div (-9x^3y^4z) =$

$\frac{-45x^5y^6z^3}{-9x^3y^4z} = 5x^2y^2z^2$

5) $(8x^3y^4) \div (2x^3y) =$

$8x^3y^4 \div 3x^3y = 2 \cdot 6\ y^3$

4) Actividades a realizar parte 3

1) $(2x+1)\cdot(3x+2) = 6x^2+7x+2$

$2x \cdot 3x = 6x^2$

$3x+2x = 7x$

$1 \times 2 = 2$

2) $(3x+3)\cdot(4x^2+2x+1) = 12x^3+15x+3$

$3x+3 \cdot 2x \cdot x2 = 12x^3$

$3x2 = 6$ $\quad 3x+1=3$ $\quad +3x+1=3$

$3x \cdot 2x5$ $\quad 3x \times 2 = 6x^2$ $\quad 3 \cdot 2x = 6x$

3) $(3x+6)(3x-10) = 9x^2\ 12x - 60$

$3x \cdot 3x = 9x^2$

$3x \cdot -10 = -30x$ $\quad -30+18 = 12$

$6 \times 3x = 18x$ $\quad (6)\cdot(-10) = 60$

4) $(2x2+7x-6)+(4x2-2x-3)+(-3x^3+4x+5)+(-3x2+4x+5) = 19x-8$

$2x2 \cdot 4x2 + (8 \times 4)^2$

$2x2 - 2x =$

5) $(6x+7y)(4x-3y) = 24x^2+39xy+21y^2$

$6x \cdot 4x = 24x^2$ $\quad 7y \cdot 4x = 21xy$ $\quad 39xy$

$6x \cdot -3x = 18xy$ $\quad +7 \cdot -3x = 21y^2$

6) $(3x+4y)+(2x-2y) = 6x^2+12xy-6y$

$3x \cdot 2x = 6x^2$ $\quad 4x \cdot 2x = 8xy$

$3x \cdot -2y = 6xy$ $\quad +4x \cdot -2y = -6y$

7) $(2x3+5x2-4x5)+(4x3+2x2+3x-6) = -6$