Exercícios:

1) Simplifique as expressões

a) $3x^2 + 5xy + 4x^2$

b) $xy^2 + 3x^2y + 2xy^2 - x^2y$

c) $10x^2 - 5x + 1 + 12x^2 - 4x + 2$

d) $3x^3 - 4x^2 + 4xy + y^2 - 4xy - 3y^2 + 2$

2) Desenvolva:

a) $3(x - 2y)$ b) $(x + y)(3x - 2y)$ c) $(3c - b)(3c + b)$

d) $(\sqrt{7} + 2)(\sqrt{7} - 2)$ e) $(x + 7)^2$ f) $(2x - y)^2$ g) $(3a - 2b)^2$

h) $(-a + 3x)^2$

3) Fatore as expressões:

a) $x^2 - 6x + 9$

b) $x^2 - 4$

c) $-x^2 + 12x - 35$

d) $-2x^2 + 14x$

4) Simplifique as expressões:

a) $\dfrac{2x+16}{x^2-64}$

b) $\dfrac{x^2-4x+4}{x^2-4}$

c) $\dfrac{x^2-x+6}{x-3}$