

QUESTÕES

01. Reduza as expressões algébricas.

A) $x + 3x + 5x + 7x + 9x - 20x$

B) $2x + 4x + 6x + 8x + 10x + 12x - 45x$

C) $x - 2x - 3x + 4x - 5x + 6x - 7x + 2x$

D) $4x + 10 + 3x + 15x + 8 - 6x + 7 - 3x - 32$

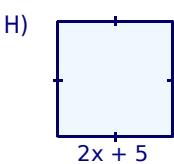
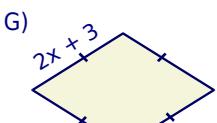
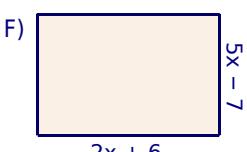
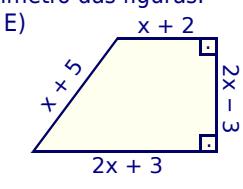
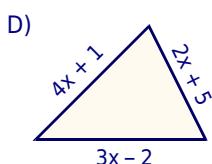
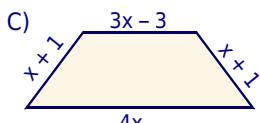
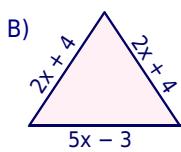
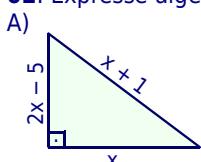
E) $6x - 20 - 4x + 8 - 5x + 6 - 7x + 1 - 4x + 13 + 6x - 10$

F) $-4x + 9 + 5x - 8 - 8x + 10 + 9x + 5 - 8x - 13 + 6x + 2$

G) $3x - 70 - 5x + 81 - 11x + 34 - 14x - 90 + 28x + 45$

H) $4x + 10 - 10x + 4 - 6x - 30 + 11x + 16$

02. Expressse algebricamente o perímetro das figuras.



03. Obtenha o valor numérico das expressões.

A) $2x + 3$, sendo $x = 5$.

B) $4x + 7$, sendo $x = -1$.

C) $7xy - 3x + 7$, sendo $x = 2$ e $y = -3$.

D) $x^2 - 5x + 7$, sendo $x = -3$.

E) $2x^2y + 3x^2 - 6x + 20$, sendo $x = -1$ e $y = -2$.

F) $10x^2 - 6xy + 10$, sendo $x = -\frac{5}{2}$ e $y = -\frac{4}{3}$.

G) $\frac{5x+1}{3y-7}$, sendo $x = 3$ e $y = 5$.

H) $\frac{3x^2 - 4x + 2}{y+1}$, sendo $x = -\frac{3}{4}$ e $y = -\frac{1}{2}$.

04. Elimine os parênteses e reduza as expressões.

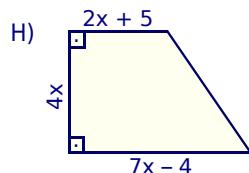
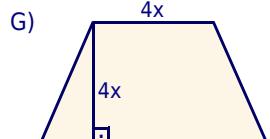
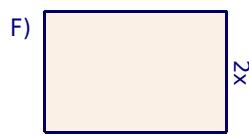
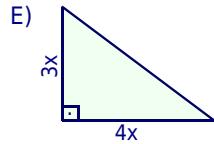
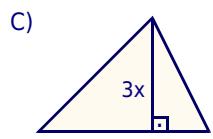
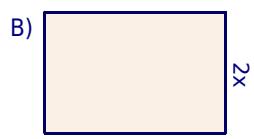
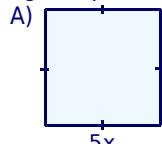
A) $3(x + 3) - 3(x - 2) + 7(x + 8) - 5(2x - 4)$

B) $4(x + 10) - 10(2x - 7) - 2(4x + 1) - x$

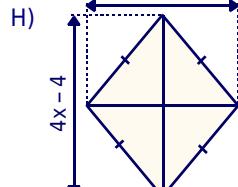
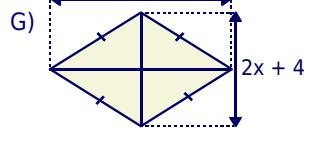
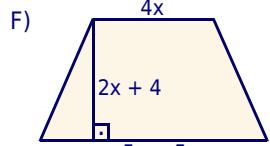
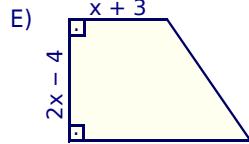
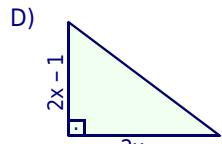
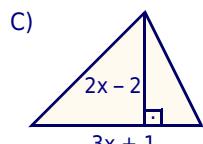
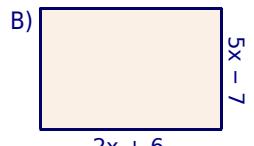
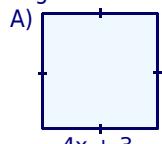
C) $5(2x + 8) - 6(4x - 1) - 7(x + 20) - 8x - 6(2x - 7)$

D) $4(2x + 3) - 2(6x + 8) - 8(6x - 2) - 5(4 - 20x)$

05. Escreva a expressão algébrica que representa a área das figuras planas a seguir.



06. Represente algebricamente a área das figuras planas a seguir.



07. Determine a área e o perímetro das figuras a seguir.

A) Sendo $x = 3$.

