Lista 4 de Cálculo
Equações de primeiro e segundo grau, inequações de primeiro grau.

1. Resolva as equações de primeiro grau:
   a) $6(x-3) = 4x+6$
   b) $-2(4-x) = 3(x-1)$
   c) $-2y = 6$
   d) $-3x+2 = -9$
   e) $2(x-5) = 2$

   f) $6(z+1) = 6$
   g) $-4(x+2) = -8$
   h) $0,1(x-2)+0,5x = 0,7$
   i) $0,4(x+3)-0,2x = 4$
   j) $0,3(y-1)+0,4(y-2) = 7$

2. Resolva as equações de primeiro grau:
   a) $\dfrac{x-1}{4}+\dfrac{x}{3} = \dfrac{1}{6}$
   b) $\dfrac{x+1}{6}+\dfrac{x-2}{3} = 2$
   c) $\dfrac{3x-2}{4}-\dfrac{x+3}{3} = 1$
   d) $\dfrac{2x+1}{2}+\dfrac{x}{3} = \dfrac{x-1}{4}$
   e) $\dfrac{5x}{3}+5x = \dfrac{6-2x}{2}$
   f) $\dfrac{x-4}{4}+\dfrac{3x-1}{3} = 2$
   g) $\dfrac{2x-1}{9}-\dfrac{x-4}{5} = 2x$

   h) $\dfrac{2x+5}{x-3} = \dfrac{1}{3}+\dfrac{4}{x-3}$
   i) $\dfrac{3x}{x+1} = 4+\dfrac{2x}{2x+2}$
   j) $\dfrac{2y}{5}-\dfrac{5+2y}{3} = 1$
   k) $\dfrac{2t}{3}-\dfrac{3t+2}{5} = 2$
   l) $M = 100+100i$ (incógnita i)
   m) $\dfrac{2k-3}{2} = \dfrac{2}{3}+\dfrac{m-5}{9}$ (incógnita m)
   n) $y = \dfrac{2x+1}{x-3}$ (incógnita x)

3. Resolva as inequações:

   a) $5x > 15$
   b) $-4x < 12$
   c) $2y+1 \geq y-5$
   d) $3(z-4) \leq 2(z-6)$

   e) $4(2x-3) > 2(x-1)$
   f) $\dfrac{x-1}{2}+\dfrac{x}{3} \geq 4$
   g) $\dfrac{x+2}{5}-\dfrac{x+3}{2} \geq 1$

   h) $\dfrac{3y-5}{2}+\dfrac{y-2}{3} \geq 4$
   i) $\dfrac{2m-4}{2}+\dfrac{m-1}{3} \leq 1$

4. Resolva as equações de segundo grau:

   a) $x^2-8x = 0$
   b) $x^2-49 = 0$
   c) $x^2+16 = 0$
   d) $3x^2-6x = 0$

   e) $9x^2+3x = 0$
   f) $2x^2-2x-4 = 0$
   g) $3x^2+10x+3 = 0$
   h) $3x^2-7x+2 = 0$

   i) $x^2-8x+12 = 0$
   j) $x^2-x-2 = 0$
   k) $x^2+2x+1 = 0$
   m) $x^2+2x+2 = 0$