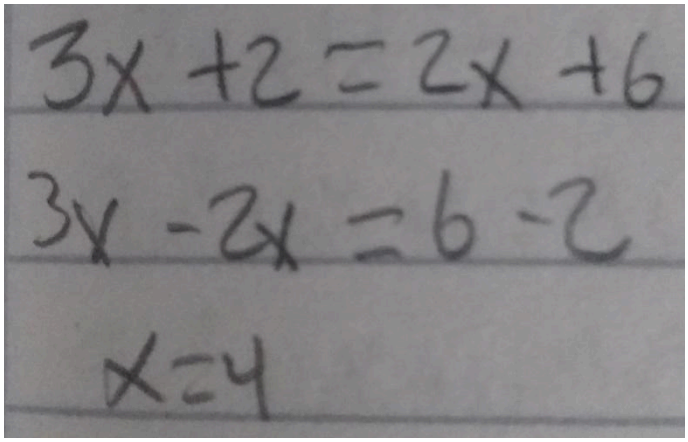
TIA: Taller: Ecuaciones
NOMBRES Y APELLIDOS COMPLETOS:
- Edwin Arcángel Escobar
- Andrés Felipe Rivera Aristizábal
- Juan José Portilla Trejos

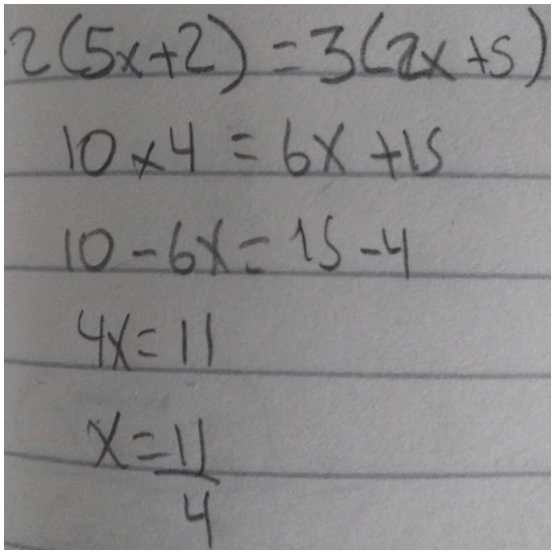
Escriba en su cuaderno de apuntes o en hojas sueltas, los procedimientos solicitados y escanéelos o tómeles fotos para que pueda adjuntarlos como evidencia de su trabajo.

1. Resuelva las siguientes ecuaciones lineales:

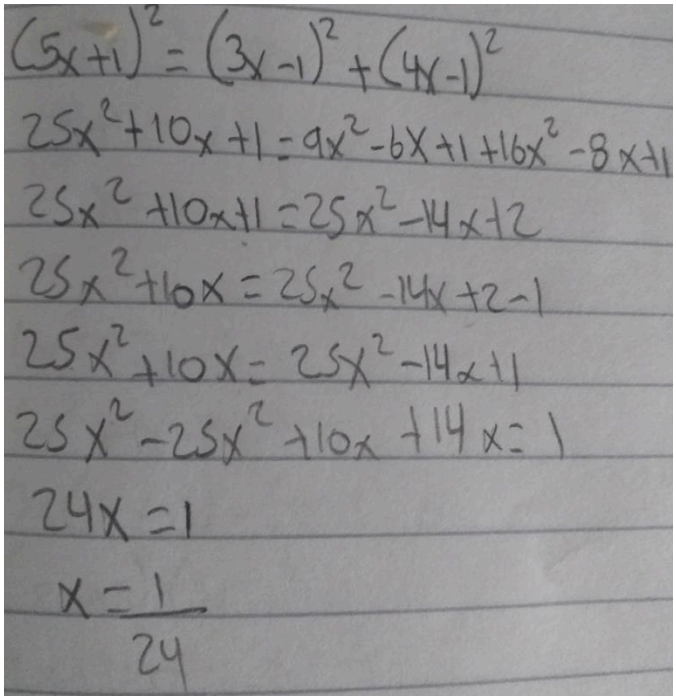
3x + 2 = 2x + 6



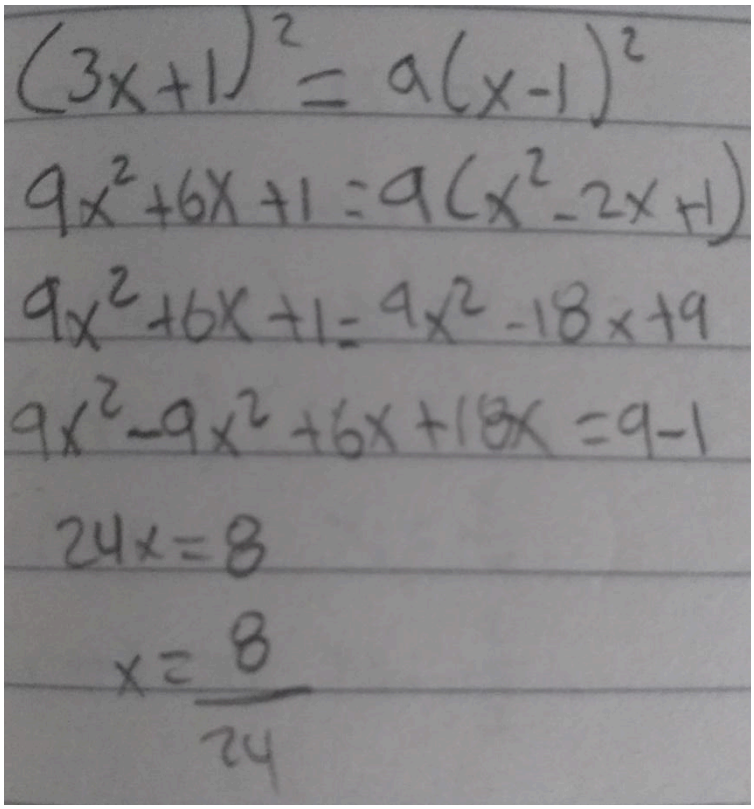
2(5x + 2) = 3(2x + 5)



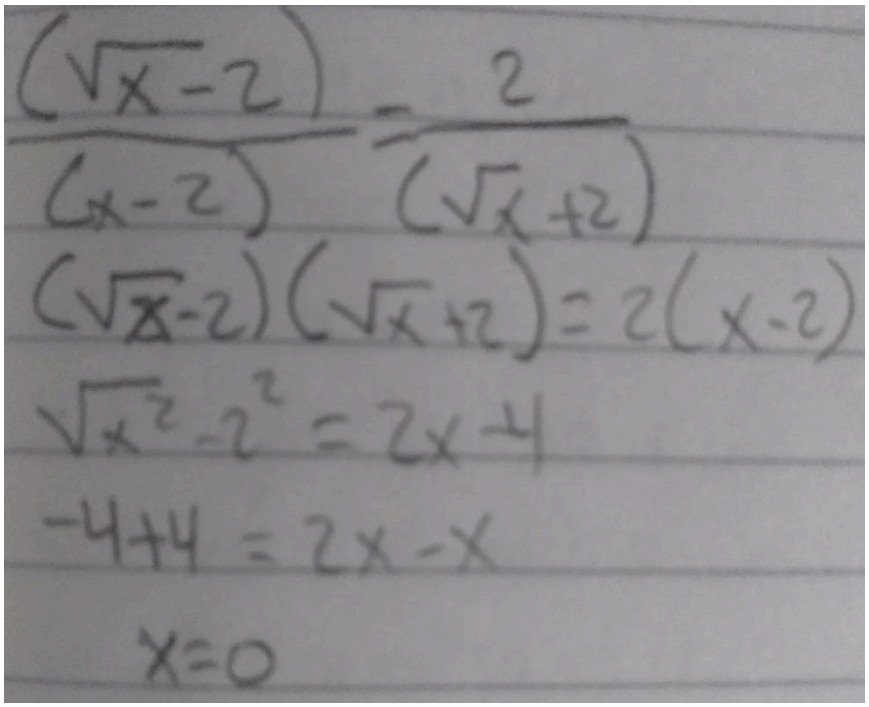
$(5x + 1)^2 = (3x - 1)^2 + (4x - 1)^2$



$(3x + 1)^2 = 9(x - 1)^2$



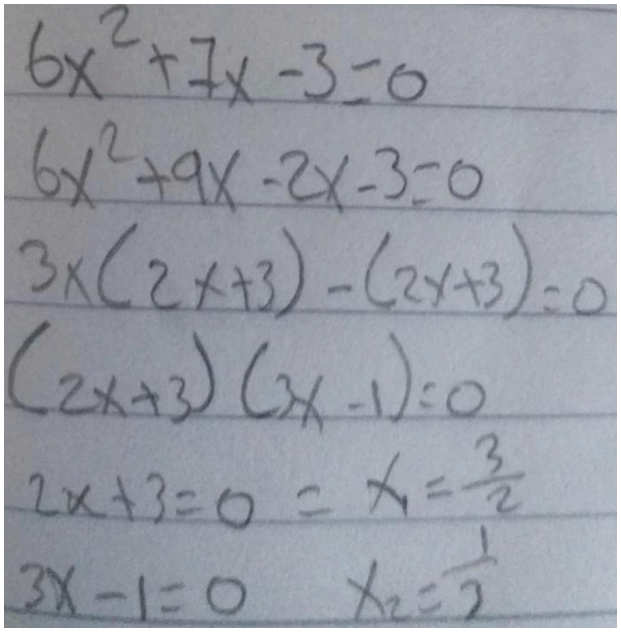
$((\sqrt{x}- 2) / (x - 2)) = (2 / (\sqrt{x}+ 2))$



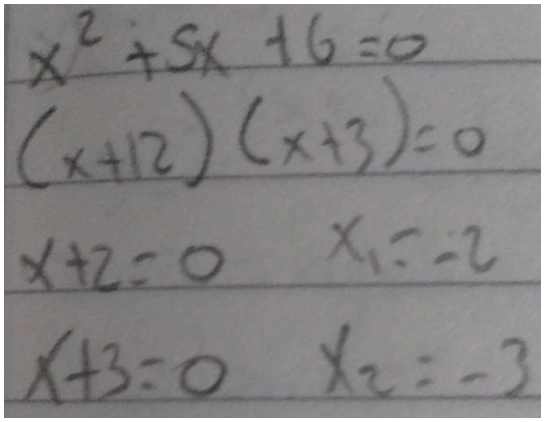
Realizado por: Juan David Builes Grisales
Fecha: 23 de Octubre de 2017

2. Resuelva las siguientes ecuaciones cuadráticas:

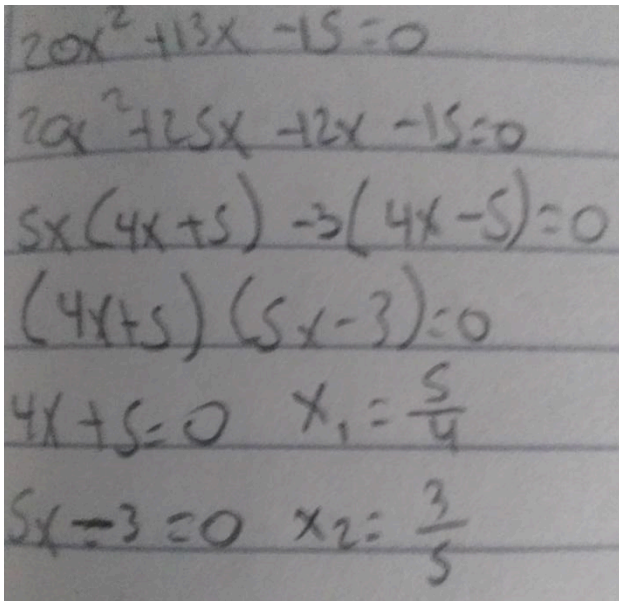
$6x^2 + 7x - 3 = 0$



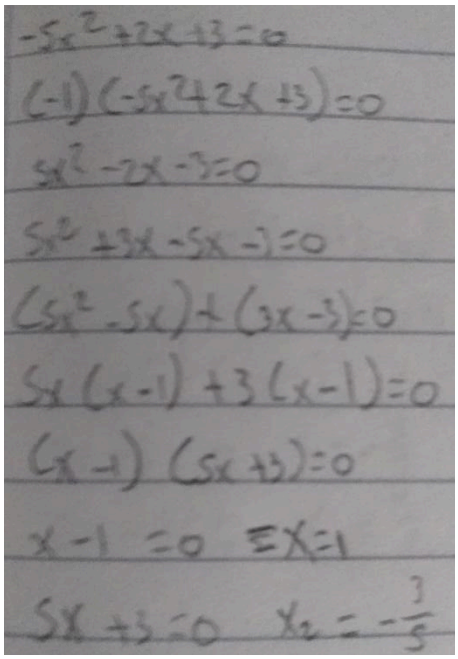
$x^2 + 5x + 6 = 0$



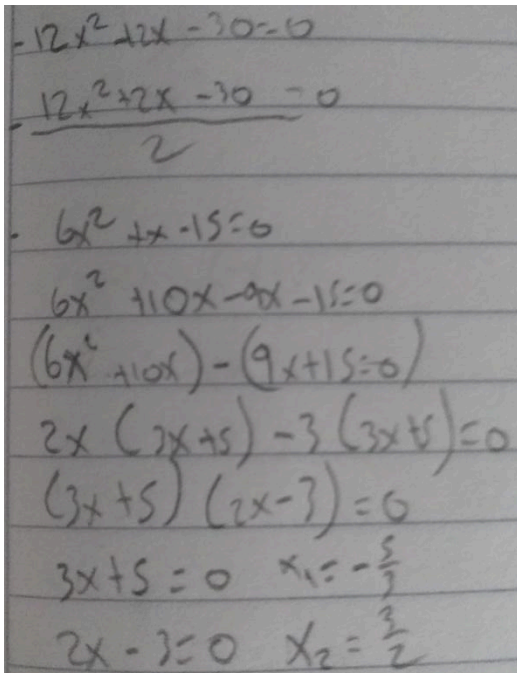
$20x^2 + 13x - 15 = 0$


$20x^2+13x-15=0$
$20x^2+25x-12x-15=0$
$5x(4x+5)-3(4x-5)=0$
$(4x+5)(5x-3)=0$
$4x+5=0 \quad x_1=\frac{5}{4}$
$5x-3=0 \quad x_2=\frac{3}{5}$

$-5x^2 + 2x + 3 = 0$

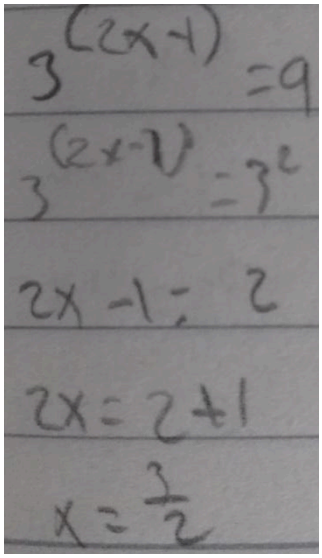

$-5x^2+2x+3=0$
$(-1)(-5x^2+2x+3)=0$
$5x^2-2x-3=0$
$5x^2+3x-5x-3=0$
$(5x^2-5x)+(3x-3)=0$
$5x(x-1)+3(x-1)=0$
$(x-1)(5x+3)=0$
$x-1=0 \quad x=1$
$5x+3=0 \quad x_2=-\frac{3}{5}$

$12x^2 + 2x - 30 = 0$

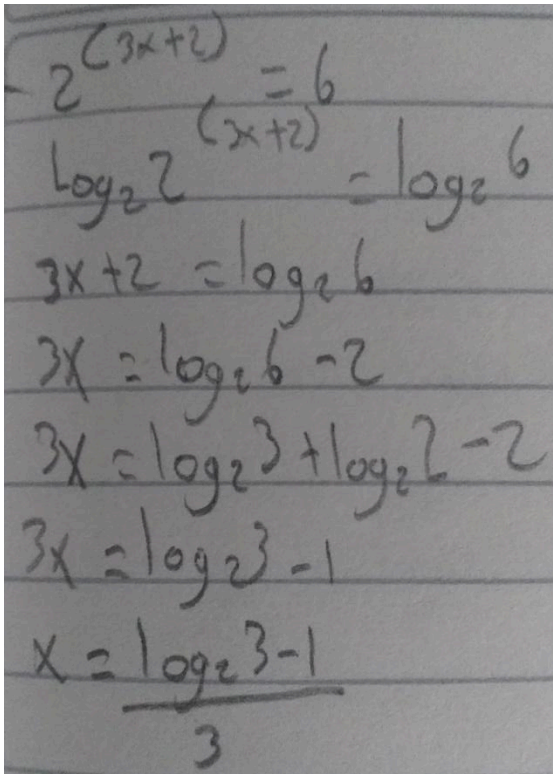

$12x^2+2x-30=0$
$\frac{12x^2+2x-30}{2}=0$
$6x^2+x-15=0$
$6x^2+10x-9x-15=0$
$(6x^2+10x)-(9x+15=0)$
$2x(3x+5)-3(3x+5)=0$
$(3x+5)(2x-3)=0$
$3x+5=0 \quad x_1=-\frac{5}{3}$
$2x-3=0 \quad x_2=\frac{3}{2}$

3. Resuelva las siguientes ecuaciones exponenciales y logarítmicas

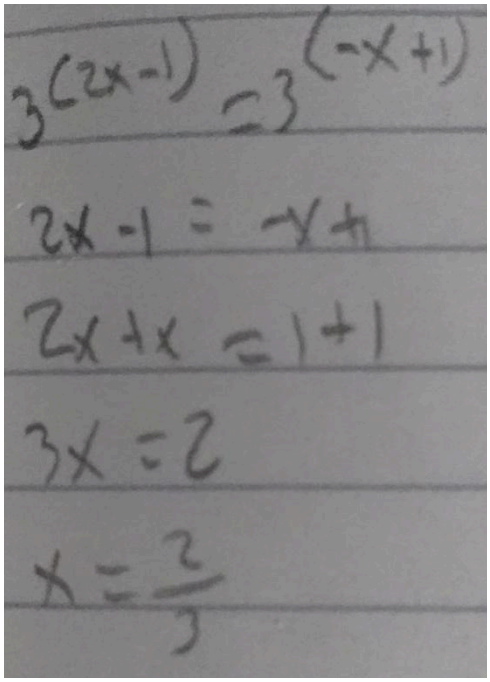
$3^{(2x - 1)} = 9$



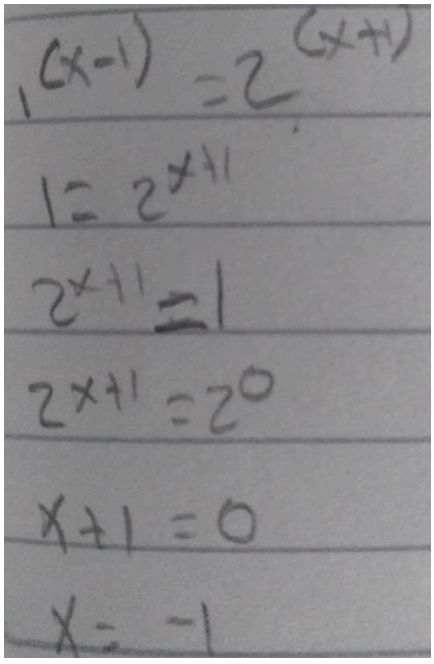
$2^{(3x + 2)} = 6$



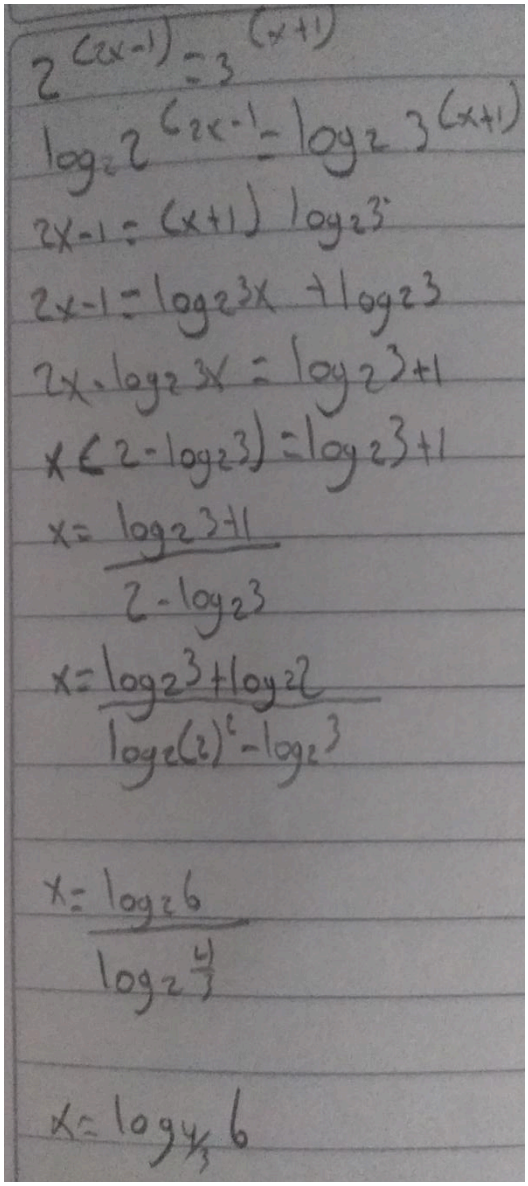
$3^{(2x - 1)} = 3^{(-x + 1)}$



$1^{(x - 1)} = 2^{(x + 1)}$



$2^{(2x - 1)} = 3^{(x + 1)}$:


2^(2x-1) = 3^(x+1)
log2 2^(2x-1) = log2 3^(x+1)
2x-1 = (x+1) log2 3
2x-1 = log2 3x + log2 3
2x - log2 3x = log2 3 + 1
x(2 - log2 3) = log2 3 + 1
x = log2 3 + 1 / 2 - log2 3
x = log2 3 + log2 2 / log2 (2)^2 - log2 3
x = log2 6 / log2 4/3
x = log 4/3 6