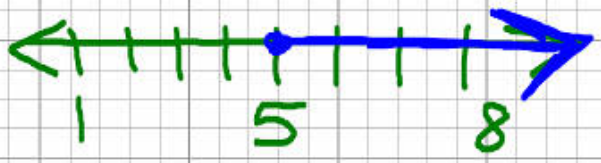
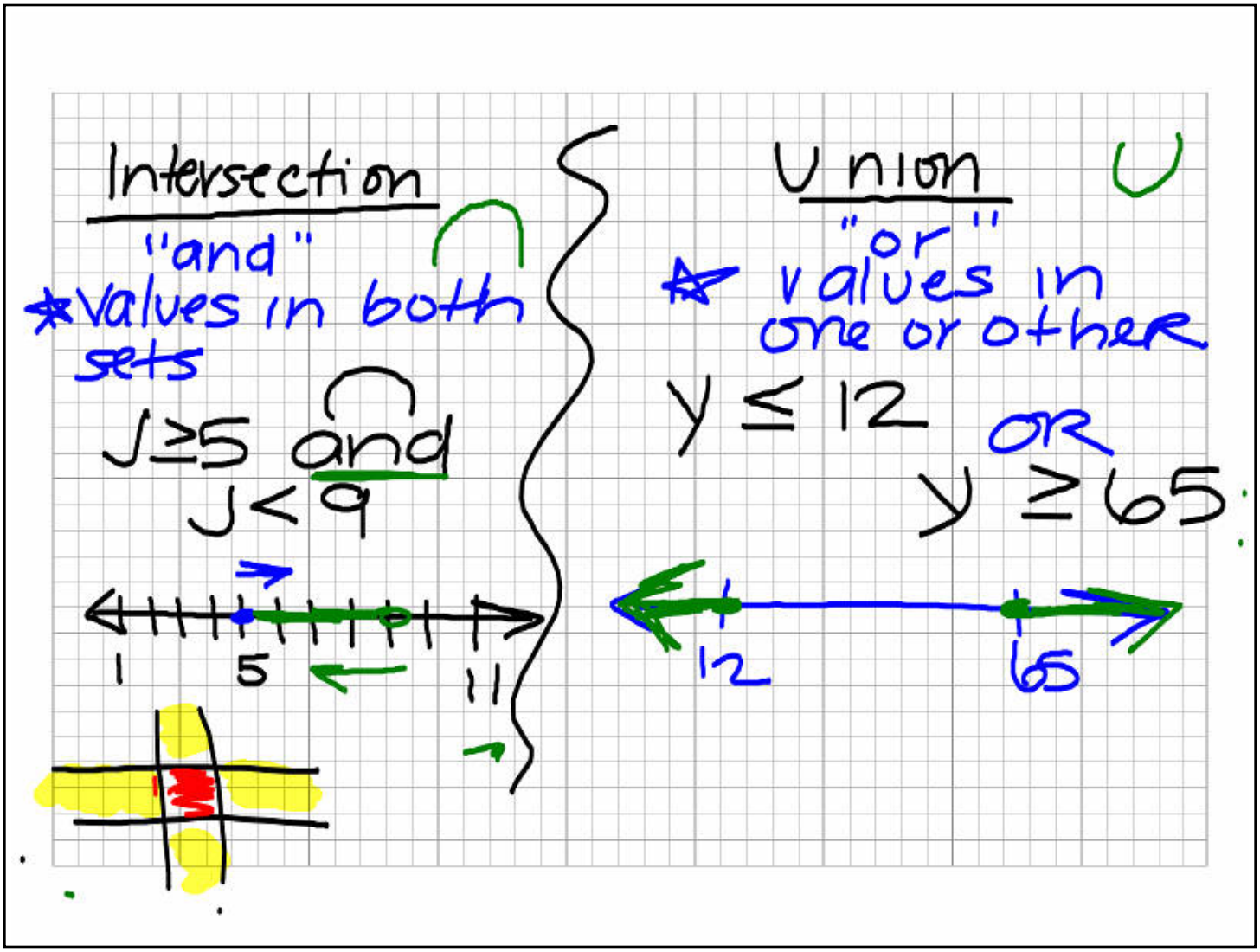
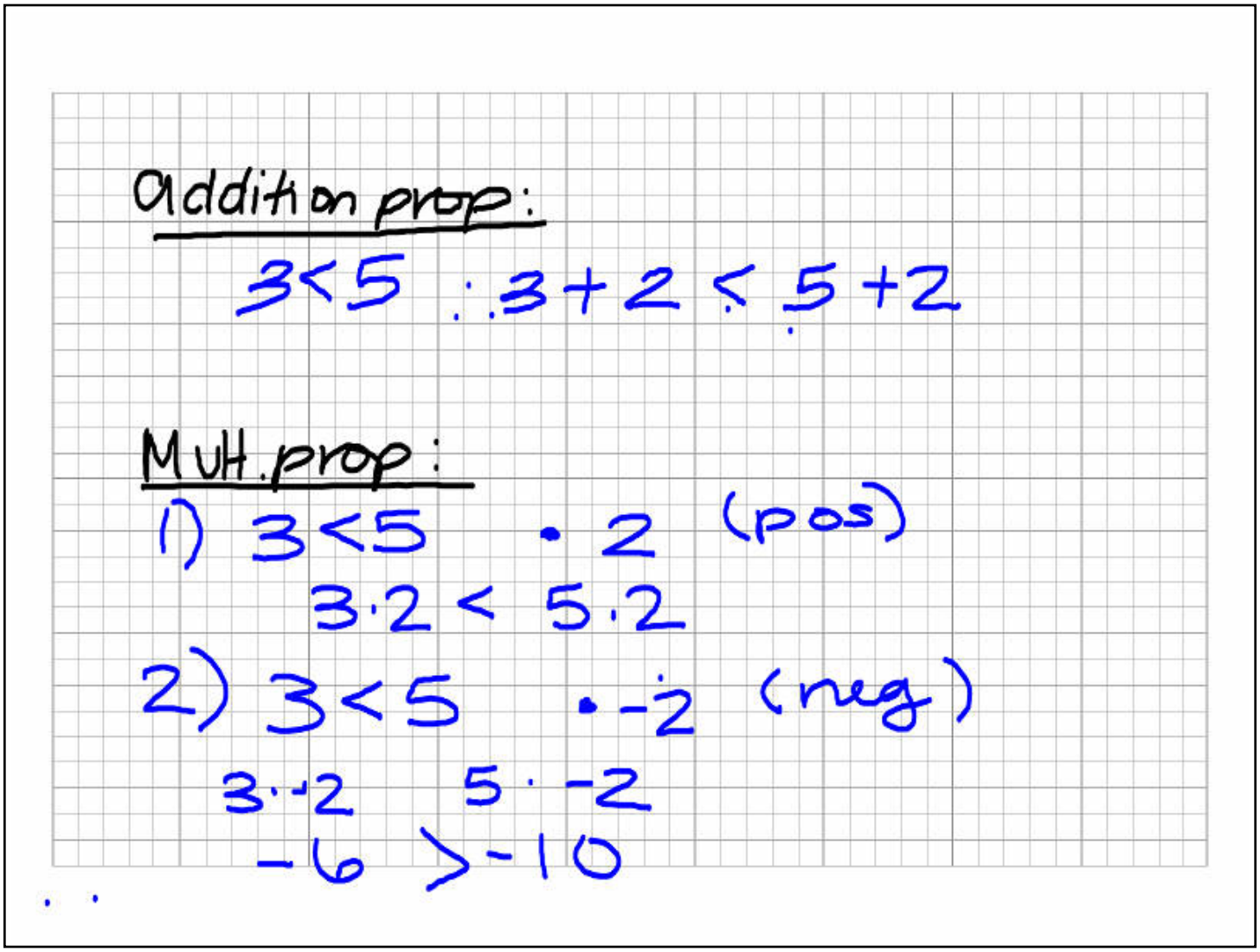
# 5.1 Ineq. & Compound Sentences

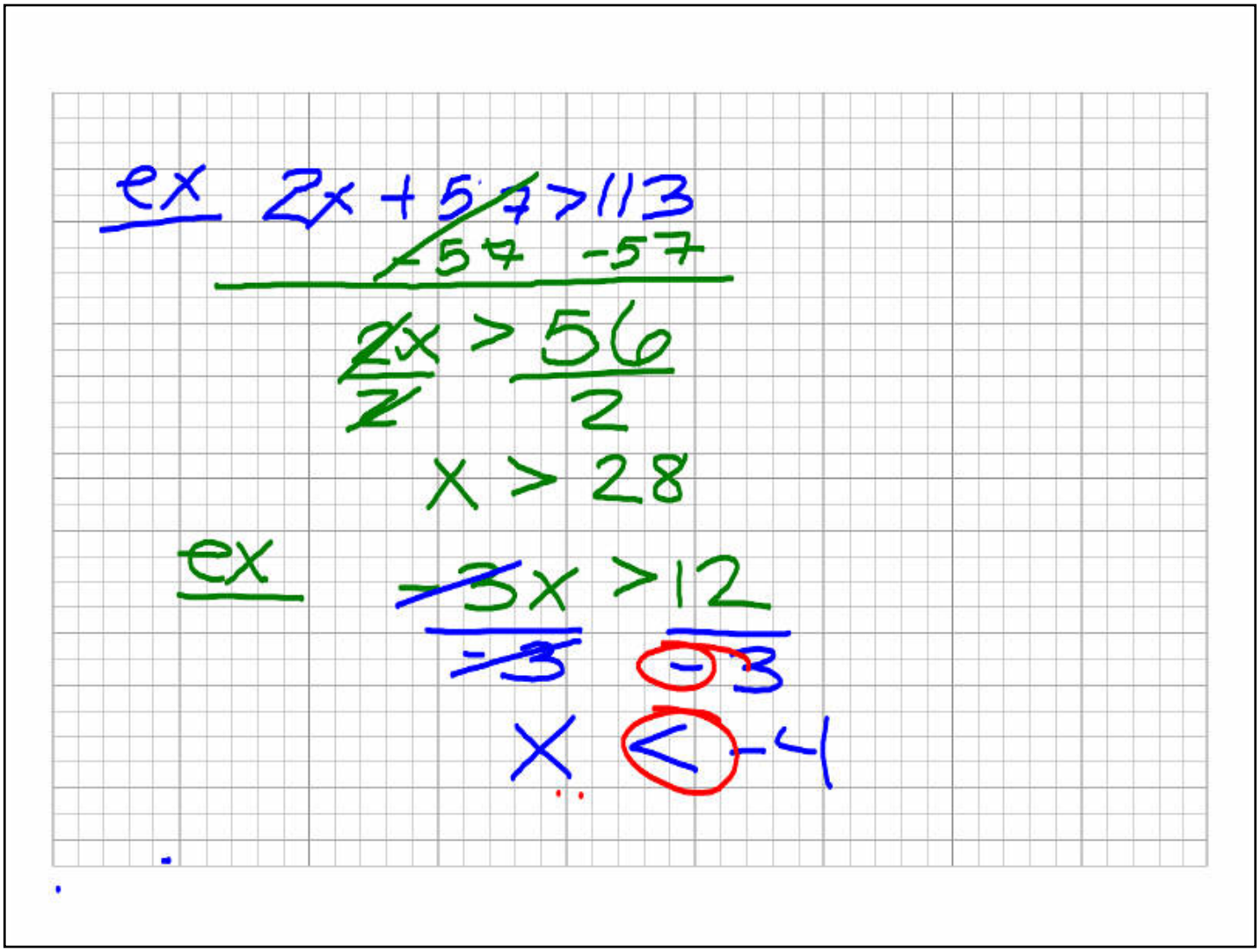
$>, <, \leq, \geq, \neq$

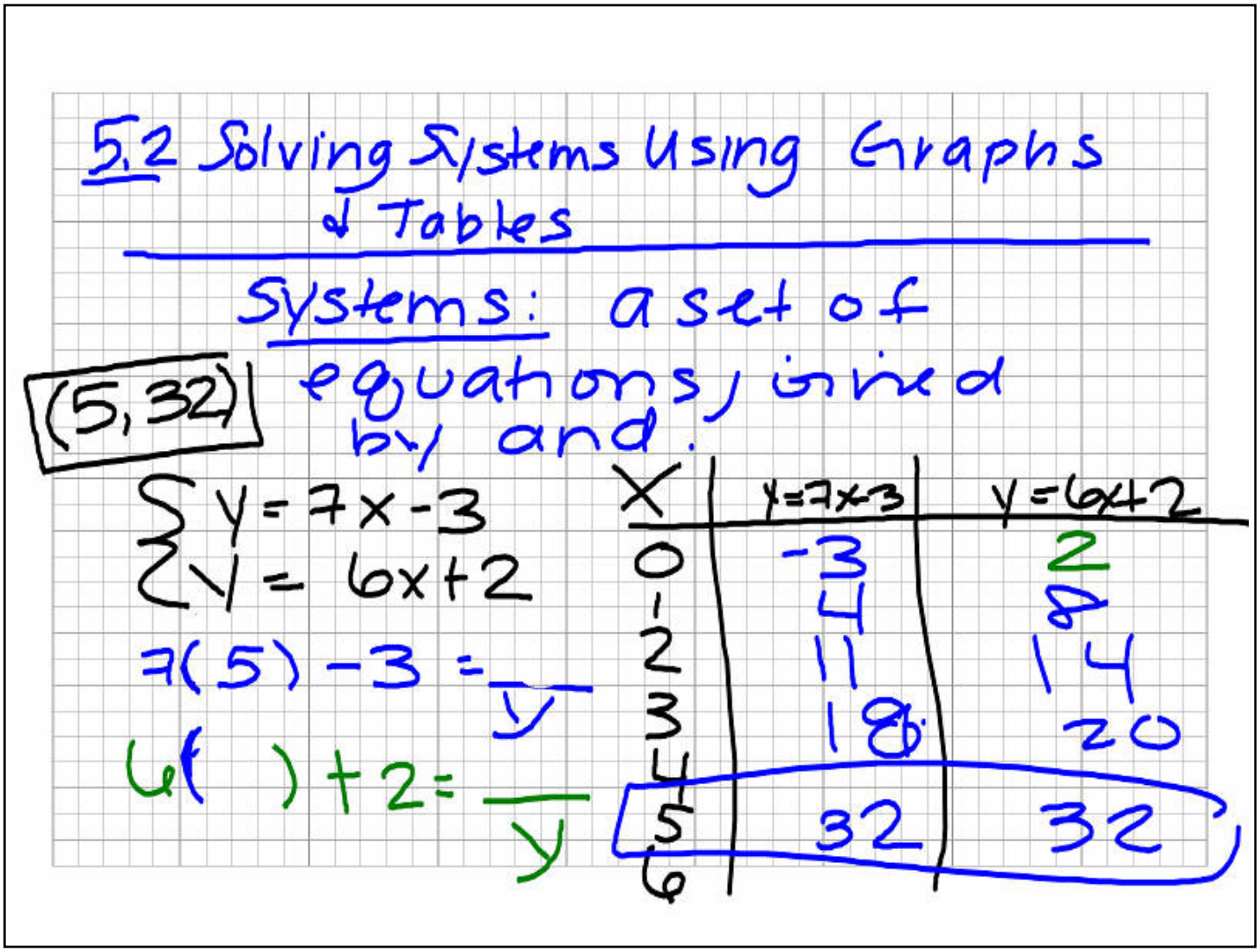
$J \geq 5$




Intersection
"and"
*values in both sets
J ≥ 5 and J < 9
1
5
11
Union
"or"
* values in one or other
y ≤ 12 OR y ≥ 65
12
65


Addition prop:
3<5 ∴3+2<5+2
Mult. prop:
1) 3<5 • 2 (pos)
3·2 < 5·2
2) 3<5 • -2 (neg)
3·-2 5·-2
-6 > -10
∴


ex 2x + 5 > 113
-5 -5
2x > 56
2 2
x > 28
ex -3x > 12
-3 -3
x < -4


5.2 Solving Systems Using Graphs & Tables
Systems: a set of equations joined by and.
(5, 32)
y = 7x - 3
y = 6x + 2
7(5) - 3 = y
6( ) + 2 = y
X
y=7x-3
y=6x+2
0
-3
2
1
4
8
2
11
14
3
18
20
4
5
32
32
6