Factoring:

Reviews:

1) $n^2 - 5n + 6 \rightarrow (n-3)(n-2)$

	n	-3
n	n^2	$-3n$
-2	$-2n$	6

f of 6

~~2, 3~~

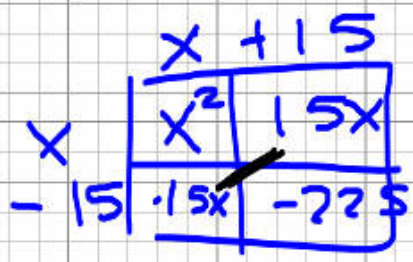
-2, -3 = -5

1, 6

-1, -6

2) $x^2 - 225$

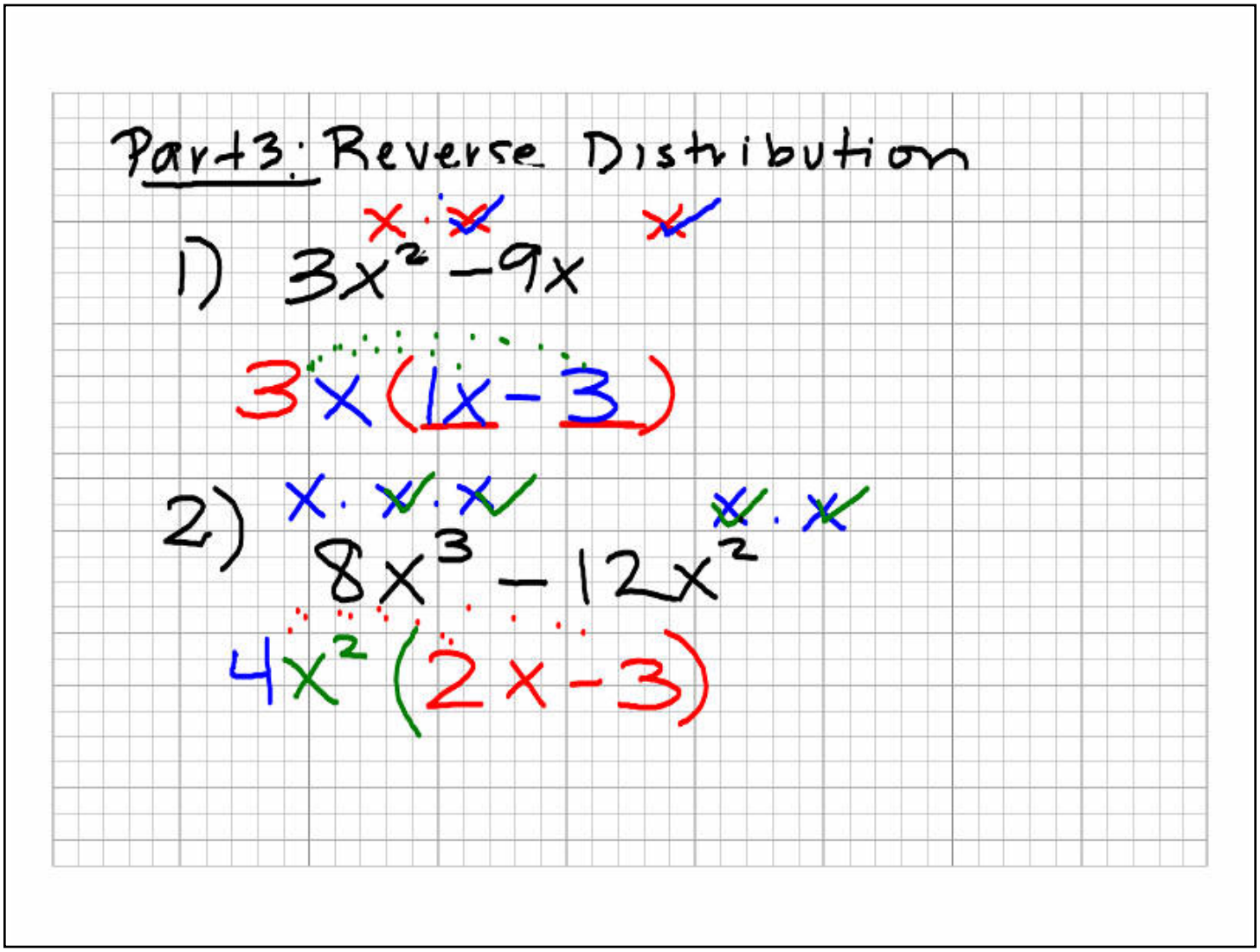
$(x + 15)(x - 15)$

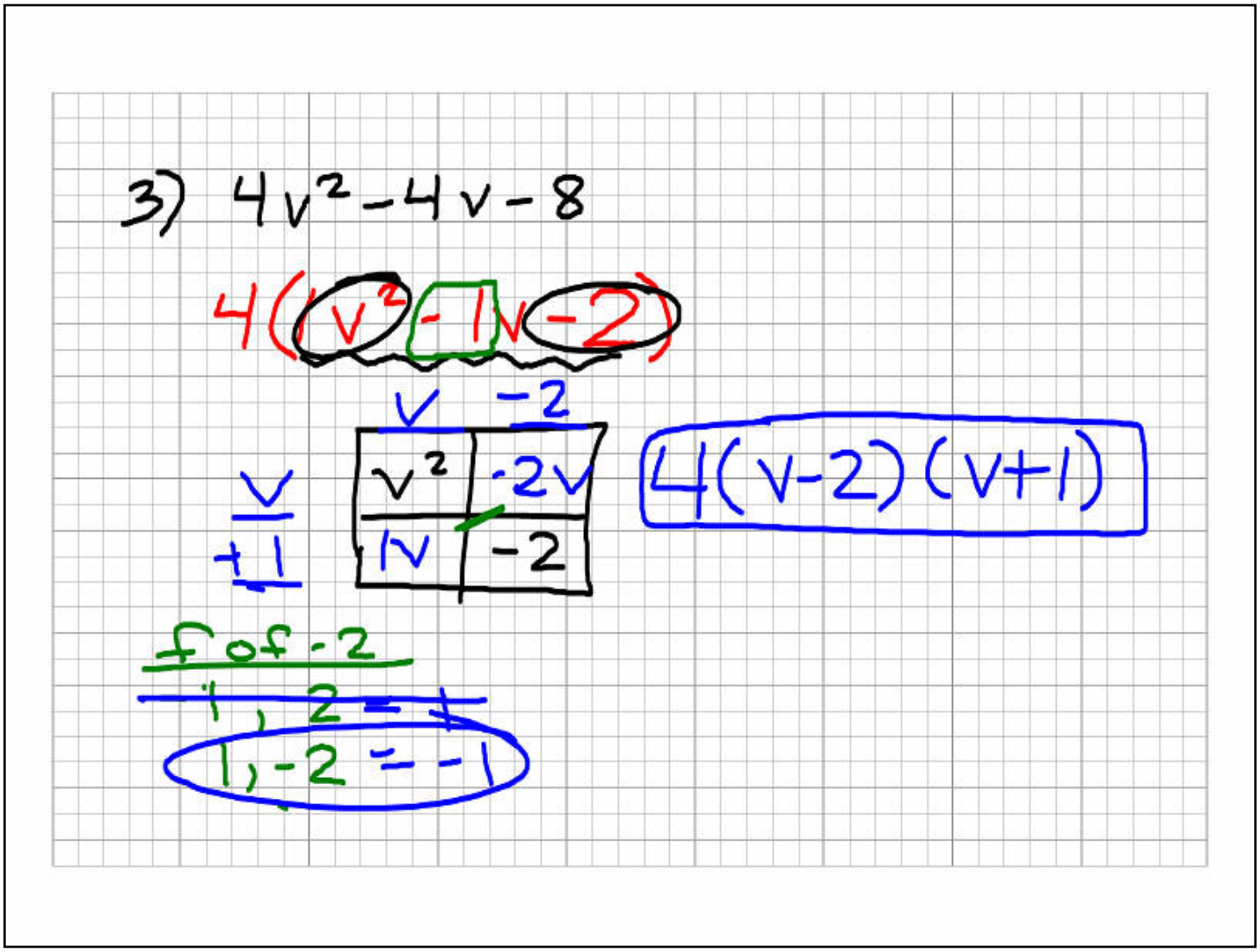


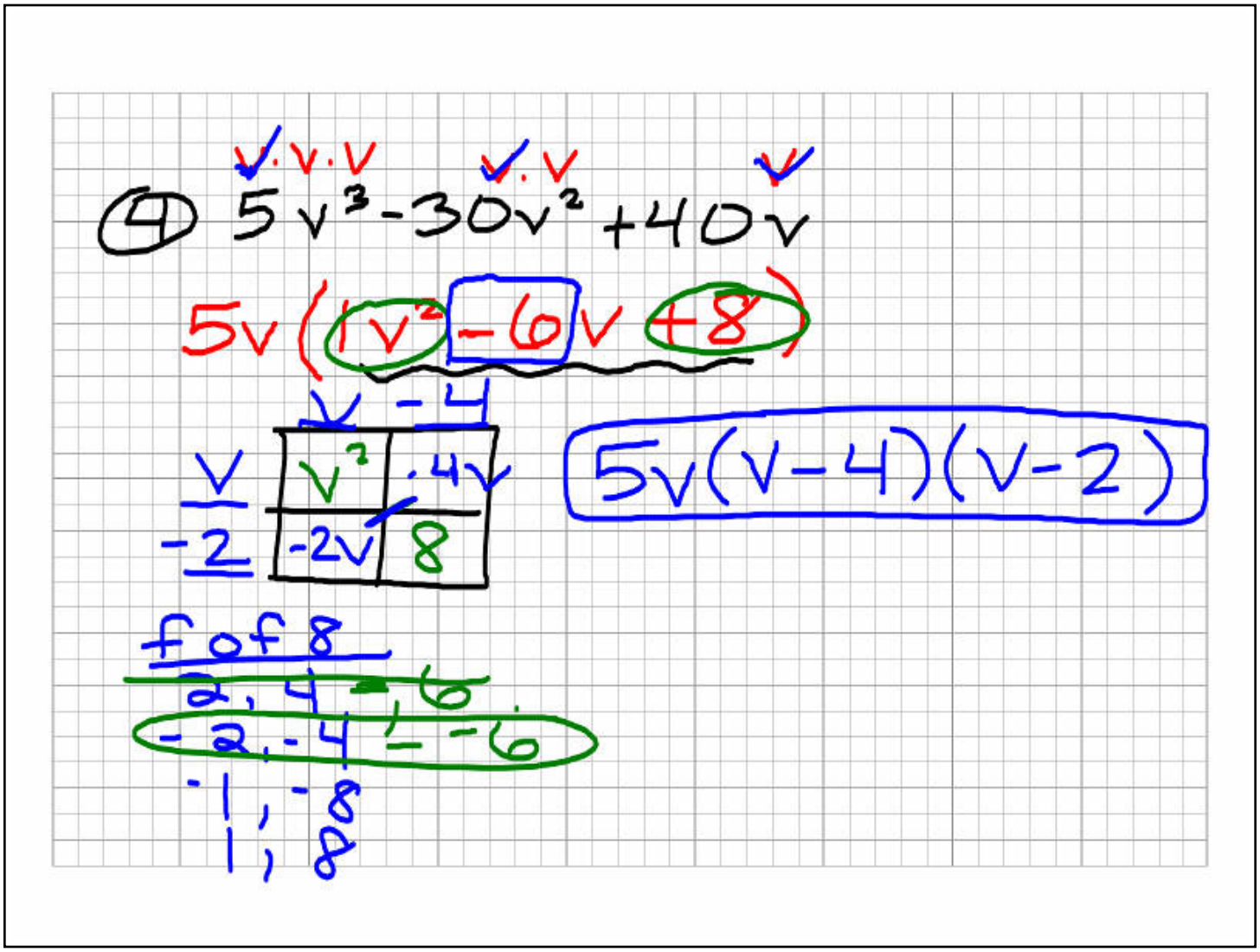
$x^2 + 0x - 225$

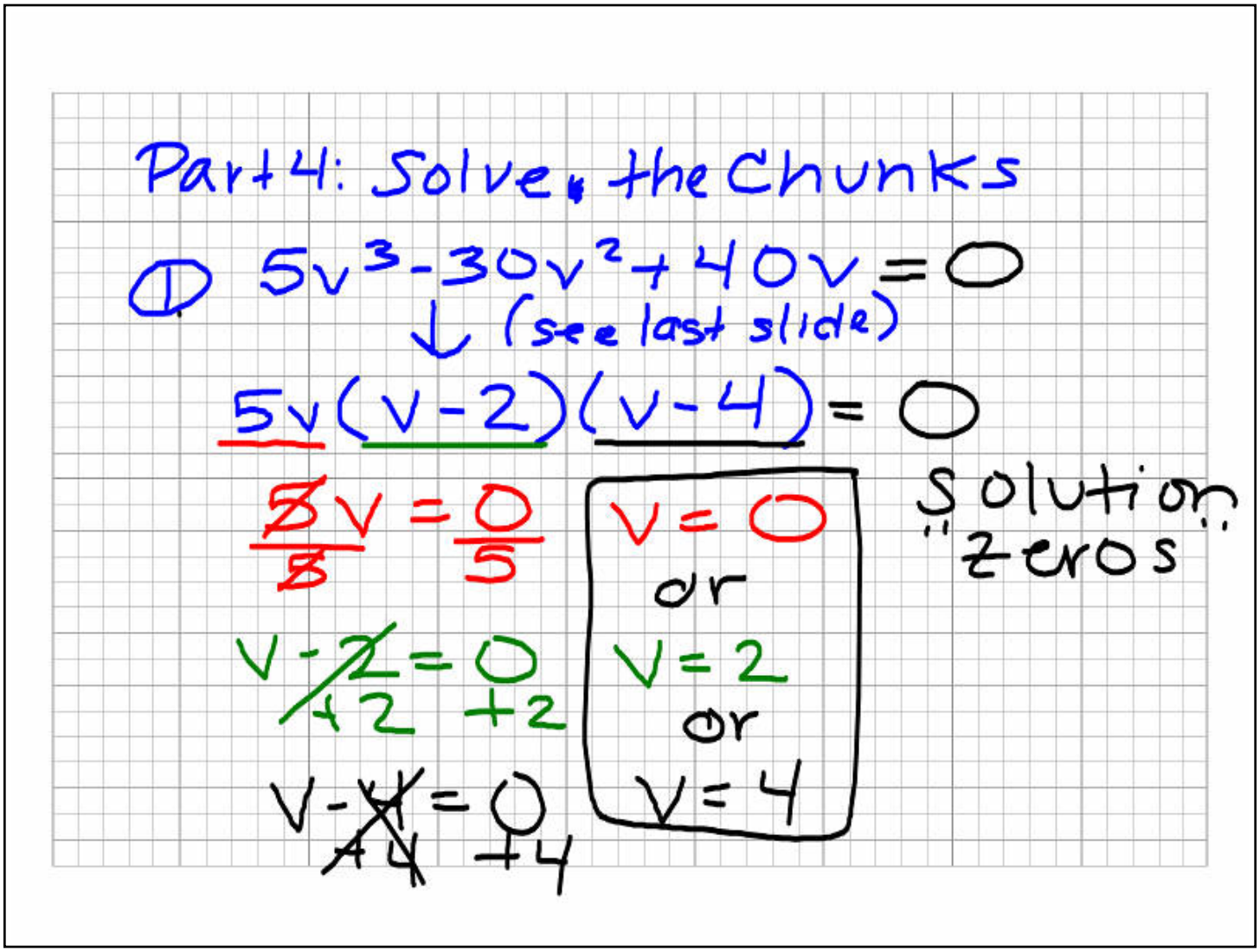
$x^2 - 225$

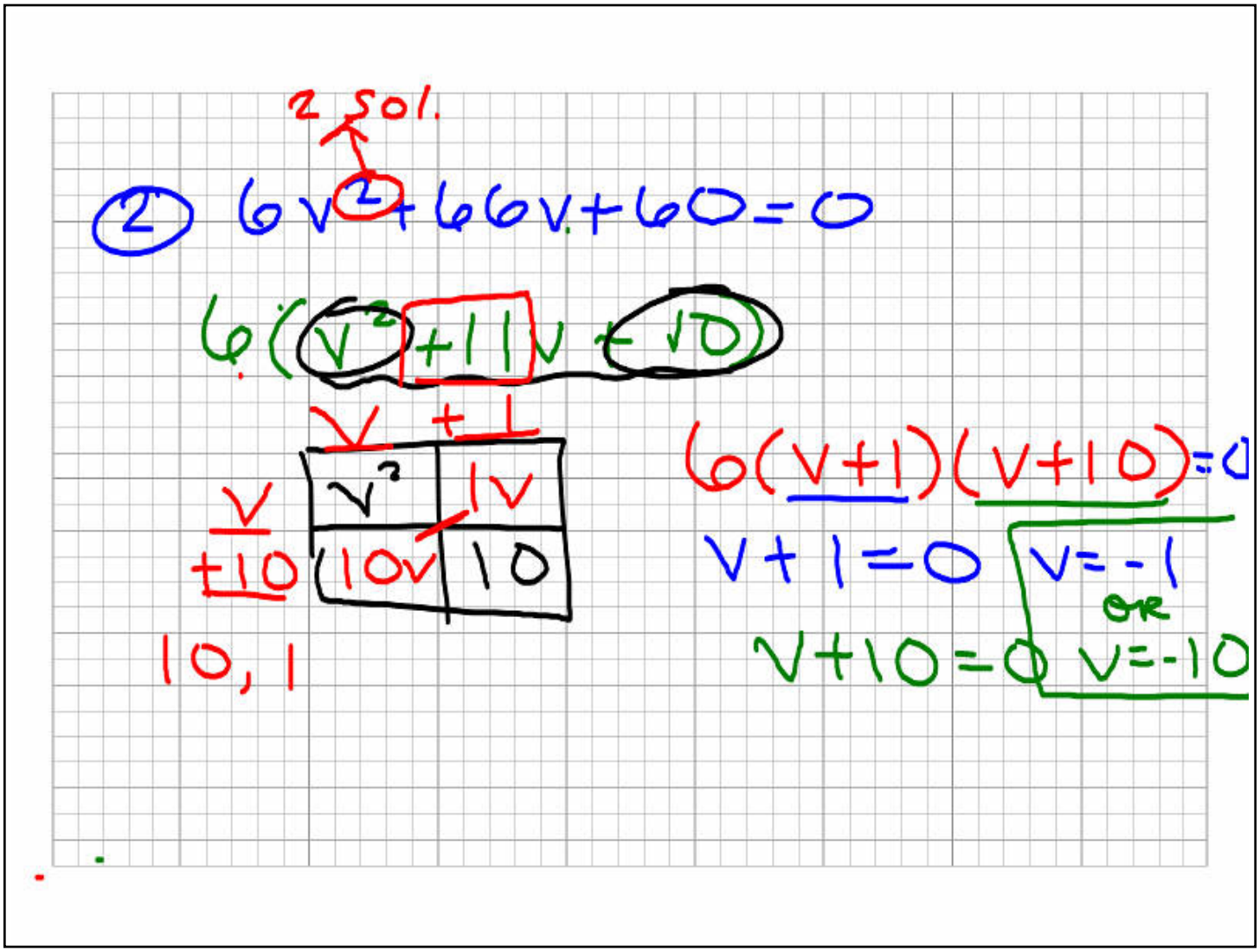
$\therefore$

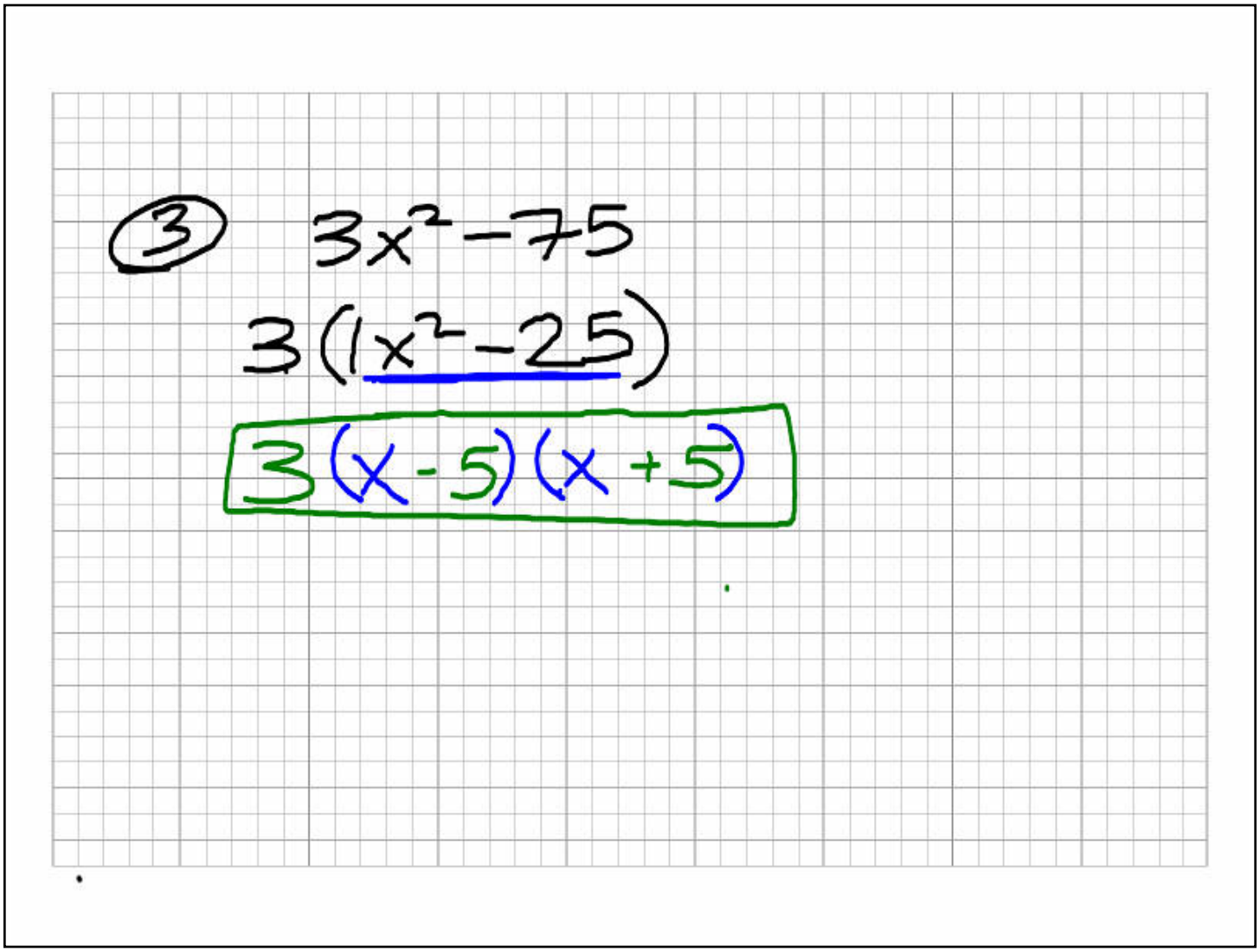

Part 3: Reverse Distribution
1) $3x^2 - 9x$
$3x(1x - 3)$
2) $8x^3 - 12x^2$
$4x^2(2x - 3)$


3) $4v^2-4v-8$
$4(v^2-1v-2)$
v −2
v
+1
v^2 −2v
1v −2
$4(v-2)(v+1)$
f of -2
1, 2 = +
1, -2 = -1


④ $5v^3-30v^2+40v$
$5v(v^2-6v+8)$
v -4
v v^2 $-4v$
-2 $-2v$ 8
$5v(v-4)(v-2)$
f of 8
2, 4, 6
-2, -4, -6
-1, -8
1, 8


Part 4: Solve the Chunks
① $5v^3-30v^2+40v=0$
↓ (see last slide)
$5v(v-2)(v-4)=0$
$\frac{5v}{5}=\frac{0}{5}$
$v=0$
or
$v-2=0$
$+2\ +2$
$v=2$
or
$v-4=0$
$+4\ +4$
$v=4$
Solution: "zeros"


2 sol.
(2) $6v^2+66v+60=0$
$6(v^2+11v+10)$
$6(v+1)(v+10)=0$
$v+1=0$ $v=-1$
OR
$v+10=0$ $v=-10$
v | +1
v | v^2 | 1v
+10 | 10v | 10
10, 1


(3) $3x^2-75$
$3(1x^2-25)$
$3(x-5)(x+5)$