Name KEY

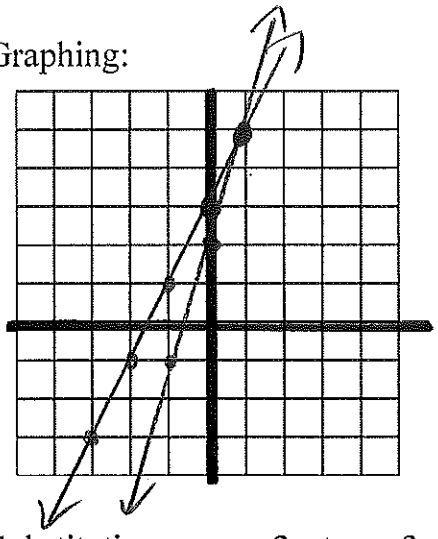
Solve the system of equations by graphing, substitution, and the addition method.

1. $-2x + y = 3$
   $3x - y = -2$

$-2x + y = 3$
$+2x \quad +2x$
$y = 2x + 3$

$3x - y = -2$
$-3x \quad -3x$
$-y = -3x - 2$
$-1 \quad -1 \quad -1$
$y = 3x + 2$

Graphing:



$(1, 5)$

Substitution: $-2x + y = 3$
$3x - y = -2$ $\longrightarrow$ $-2x + y = 3$
$+2x \quad +2x$
$y = 2x + 3$

$3x - (2x + 3) = -2$
$3x - 2x - 3 = -2$
$+3 \quad +3$
$x = 1$

$y = 2(1) + 3$
$y = 5$

$(1, 5)$

Addition : $-2x + y = 3$
$+ \quad 3x - y = -2$
$x = 1$

$-2(1) + y = 3$
$-2 + y = 3$
$+2 \quad +2$
$y = 5$

Solution: $(1, 5)$