Solve the following system...

???

$$8 \cdot \quad 3x + \frac{1}{8}y = 13 \quad (1)$$

$$4 \cdot \quad -8x + \frac{1}{4}y = -44 \quad (2)$$

$(1) \times 8$ $\quad 24x + y = 104 \quad \ldots (3)$

$(2) \times 4$ $\quad -32x + y = -176 \quad \ldots (4)$

$(3) - (4)$ $\quad \frac{56x}{56} = \frac{280}{56}$

$x = 5 \quad \ldots (5)$

Sub (5) into (3)

$24(5) + y = 104$

$120 + y = 104$

$y = 104 - 120$

$= -16$

$(5, -16)$

PRACTICE PROBLEMS...

Worksheet - Solving Systems (Mixed).pdf

Do ALL Odd #'s

Solutions...

Kuta Software - Infinite Algebra 2

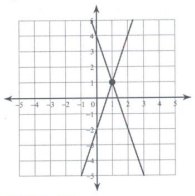
Name_____

Systems of Two Equations

Date_____ Period____

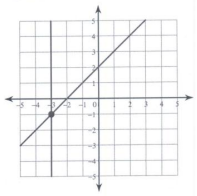
Solve each system by graphing.

1) $y = -3x + 4$
$y = 3x - 2$



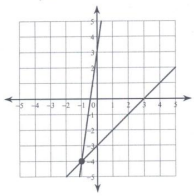
(1, 1)

2) $y = x + 2$
$x = -3$



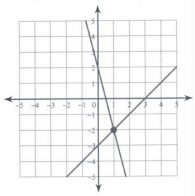
(−3, −1)

3) $x - y = 3$
$7x - y = -3$



(−1, −4)

4) $4x + y = 2$
$x - y = 3$



(1, −2)

Solve each system by substitution.

5) $y = 4x - 9$
$y = x - 3$

(2, −1)

6) $4x + 2y = 10$
$x - y = 13$

(6, −7)

7) $y = -5$
$5x + 4y = -20$

(0, −5)

8) $x + 7y = 0$
$2x - 8y = 22$

(7, −1)

9) $6x + 8y = -22$
$y = -5$

(3, −5)

10) $-7x + 2y = 18$
$6x + 6y = 0$

(−2, 2)

11) $7x + 2y = -19$
$-x + 2y = 21$

(−5, 8)

12) $3x - 5y = 17$
$y = -7$

(−6, −7)

13) $-7x + 4y = 24$
$4x - 4y = 0$

(−8, −8)

14) $4x - y = 20$
$-2x - 2y = 10$

(3, −8)

Solve each system by elimination.

15) $8x - 6y = -20$
$-16x + 7y = 30$

(−1, 2)

16) $6x - 12y = 24$
$-x - 6y = 4$

(2, −1)

17) $-8x - 10y = 24$
$6x + 5y = 2$

(7, −8)

18) $-24 - 8x = 12y$
$1 + \frac{5}{9}y = -\frac{7}{18}x$

(6, −6)

19) $-4y - 11x = 36$
$20 = -10x - 10y$

(−4, 2)

20) $-9 + 5y = -4x$
$-11x = -20 + 9y$

(1, 1)

21) $0 = -2y + 10 - 6x$
$14 - 22y = 18x$

(2, −1)

22) $-16y = 22 + 6x$
$-11y - 4x = 15$

(−1, −1)

23) $-16 + 20x - 8y = 0$
$36 = -18y - 22x$

(0, −2)

24) $-\frac{5}{7} - \frac{11}{7}x = -y$
$2y = 7 + 5x$

(−3, −4)

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Attachments

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