Math 104 Homework


# Systems of Equations Elimination (SOEE)

**Solve each system by elimination.**

1) $16x + 8y = -16$
$8x + 7y = 10$

2) $-2x + 3y = -14$
$7x + 6y = 16$

3) $4x + 12y = -8$
$-6x - 4y = -16$

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

5) $3x - 7y = 7$
$6x - 10y = 22$

6) $5x - 9y = 18$
$3x - 5y = 12$

7) $8x - 9y = 1$
$3x + 2y = -5$

8) $35x + 15y = -20$
$14x + 6y = -8$

9) $2x + 4y = -24$
$-7x + 10y = 12$

10) $-5x + 7y = 5$
$9x - 6y = 24$

11) $x + 6y = -15$
$-2x + 4y = 14$

12) $-16x + 7y = 4$
$-8x + y = 12$

13) $-6x + 5y = 17$
$-8x - 10y = 6$

14) $5x - 7y = -5$
$4x - 14y = -4$

15) $2x + 3y = 8$
$3x - 12y = 12$

16) $-9x + 5y = 27$
$8x + 4y = -24$

17) $10x - 2y = -2$
$-4x + 5y = 5$

18) $-27x - 18y = -19$
$-18x - 12y = -18$

19) $-10x + 7y = 3$
$4x - 8y = 4$

20) $3x + 3y = -6$
$-7x - 5y = 6$

# Answers to Systems of Equations Elimination (SOEE)

1) $(-4, 6)$
2) $(4, -2)$
3) $(4, -2)$
4) $(2, -2)$
5) $(7, 2)$
6) $(9, 3)$
7) $(-1, -1)$
8) Infinite number of solutions
9) $(-6, -3)$
10) $(6, 5)$
11) $(-9, -1)$
12) $(-2, -4)$
13) $(-2, 1)$
14) $(-1, 0)$
15) $(4, 0)$
16) $(-3, 0)$
17) $(0, 1)$
18) No solution
19) $(-1, -1)$
20) $(2, -4)$