Algebra 1 Name Answer Key

Solving a System of Equations Unit Review

Date 0

Solve each system using any method.

1) $-9x + 7y = -30$
$9x - 2y = 15$
$(1, -3)$

2) $x + 5y = -2$
$4x + 10y = 2$
$(3, -1)$

3) $y = -x - 4$
$y = -x - 3$
No solution

4) $y = -\frac{1}{2}x - 2$
$y = -2x + 4$
$(4, -4)$

5) $-4x + 7y = 23$
$y = -3x - 11$
$(-4, 1)$

6) $x - y = 0$
$-8x - 6y = 0$
$(0, 0)$

7) $5x + 4y = -15$
$3x + y = -9$
$(-3, 0)$

8) $3x + 3y = 20$
$-6x - 6y = -30$
No solution

9) $18y + 12 = -6x$
$-x - 26 = -9y$
$(-8, 2)$

10) $y = -5x - 11$
$15x + 3y = -33$
Infinite number of solutions

11) $-2x - 5y = 12$
$x + 6y = -13$

$(-1, -2)$

12) $y = -3$
$y = 7x + 4$

$(-1, -3)$

13) $y = x - 3$
$y = -\frac{3}{4}x + 4$

$(4, 1)$

14) $10x + 12y = -6$
$-7x - 6y = 21$

$(-9, 7)$

15) Daniel and Davis are selling cheesecakes for a school fundraiser. Customers can buy French silk cheesecakes and apple cheesecakes. Daniel sold 12 French silk cheesecakes and 12 apple cheesecakes for a total of \$288. Daivs sold 2 French silk cheesecakes and 10 apple cheesecakes for a total of \$144. Find the cost each of one French silk cheesecake and one apple cheesecake.

French silk cheesecake: \$12, apple cheesecake: \$12

16) Jimmy's school is selling tickets to a play. On the first day of ticket sales the school sold 6 adult tickets and 13 student tickets for a total of \$197. The school took in \$229 on the second day by selling 12 adult tickets and 11 student tickets. Find the price of an adult ticket and the price of a student ticket.

adult ticket: \$9, student ticket: \$11