Math 2 Name_____ ID: 1

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Cookies Study Guide

Date_____ Period____

1) The Smiley Cafe is trying to decide how much Desert Sun and Colorado Bold coffee they should buy. Desert Sun can be purchased in 10 pound bags, and Colorado Bold can be purchased in 8 pound bags, but they can only store 50 pounds or less of coffee at one time. Write an inequality that models this situation.

2) Smiley Cafe sells Desert Sun for $3.50 per cup, and the Colorado Bold for $2.75 per cup. Write a profit equation that models this situation.

3) If Smiley Cafe wants has already bought 1 bag of Desert Sun, and wants to use the rest of their storage space with Colorado Bold, how much Colorado Bold should they buy?

4) One day, Smiley Cafe sells 15 cups of Desert Sun, and 22 cups of Colorado Bold. Using your profit equation from 2), determine their profit.

Solve each system by elimination.

5) $x - 3y = -13$
$-6x + y = 10$

6) $x - 2y = 8$
$-3x + 2y = -28$

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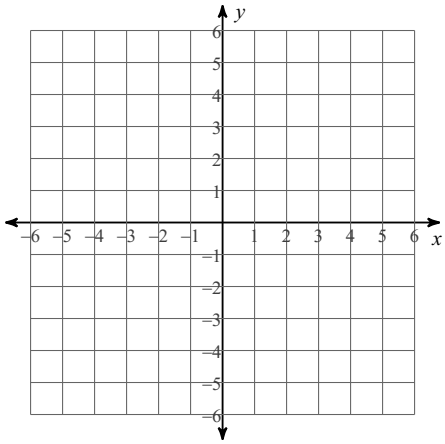
Solve each system by substitution.

7) $-7x + 3y = 24$
$-2x + y = 8$

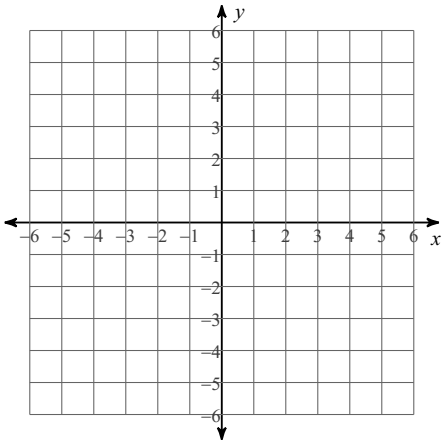
8) $y = -5x + 6$
$y = 6x - 16$

Sketch the graph of each linear inequality.

9) $2x - 5y > 5$



10) $y \leq x + 3$



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Date_____ Period____

1) The Smiley Cafe is trying to decide how much Desert Sun and Colorado Bold coffee they should buy. Desert Sun can be purchased in 10 pound bags, and Colorado Bold can be purchased in 8 pound bags, but they can only store 50 pounds or less of coffee at one time. Write an inequality that models this situation.

$10d + 8c \leq 50$

2) Smiley Cafe sells Desert Sun for $3.50 per cup, and the Colorado Bold for $2.75 per cup. Write a profit equation that models this situation.

$p = 3.5d + 2.75c$

3) If Smiley Cafe wants has already bought 1 bag of Desert Sun, and wants to use the rest of their storage space with Colorado Bold, how much Colorado Bold should they buy?

5 bags

4) One day, Smiley Cafe sells 15 cups of Desert Sun, and 22 cups of Colorado Bold. Using your profit equation from 2), determine their profit.

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Solve each system by elimination.

5) $x - 3y = -13$
$-6x + y = 10$

$(-1, 4)$

6) $x - 2y = 8$
$-3x + 2y = -28$

$(10, 1)$

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Solve each system by substitution.

7) $-7x + 3y = 24$
$-2x + y = 8$

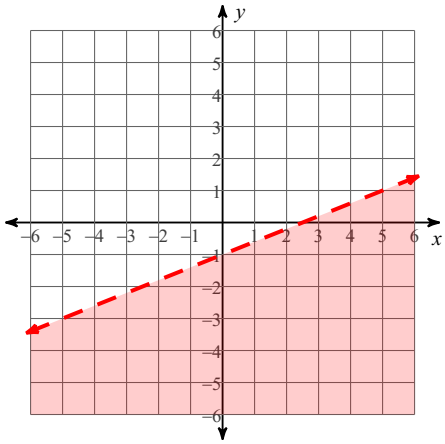
$(0, 8)$

8) $y = -5x + 6$
$y = 6x - 16$

$(2, -4)$

Sketch the graph of each linear inequality.

9) $2x - 5y > 5$



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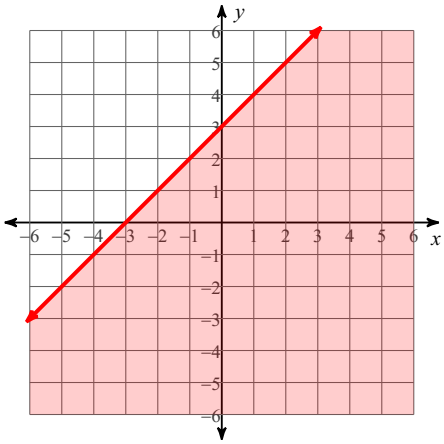

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