

### Winter Break Review

The numbers in parenthesis refer to sections in the blue book that you can refer to for help.

(1-2) Evaluate. If  $a = -3$ ,  $b = -2$ ,  $c = 1$ ,  $d = 5$ ,  $e = 2$ ,  $f = 3$ ,  $g = 4$ ,  $h = 0$

1)  $\frac{e+g}{d-f}$       2)  $(3a+b)^2$       3)  $(4e-2f)(c+d)$       4)  $f(ce+d)\frac{g}{e}$

(2-2 to 2-5) Solve.

5)  $\frac{1}{8}n = -3$       6)  $7h - 6 = 36$       7)  $2(v+7) - 9 = 19$

8)  $7y - 3 = 6(y+2)$       9)  $27 + n = -3(n-1)$       10)  $2(6x-3) = 3(4x+7)$

11) Ms. Hamm broke down on the 5 freeway. Pacoima Panther towing company charges \$30 plus \$3 per mile to tow the car. If Ms. Hamm paid \$162, how far was the car towed?

State whether each order pair is a solution of the given equation. *Hint: Plug in the ordered pair.*

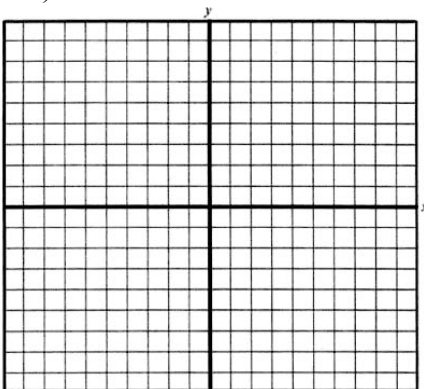
12)  $x+3y=9$ ; (3,2)      14)  $2x-y=5$ ; (4,-1)      15)  $4x+2y=6$ ; (-1,5)

(4-1) Find the slope

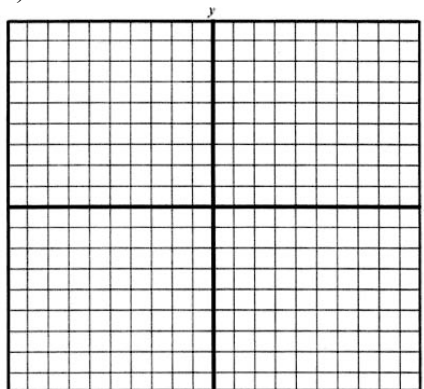
16) (1, 2), (4, 6)      17) (2, -3), (-4, -3)      18) (9, -5), (9, 8)      19) (-2, 4), (3, -1)

(4-3) Graph. (Hint: use slope-intercept form)

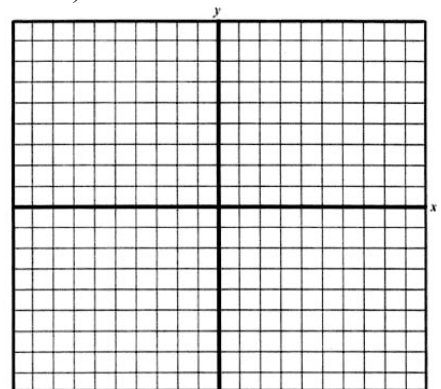
20)  $y = 3x - 4$



21)  $x - 5y = 15$



22)  $6x + 4y = 8$



(4-4 and 4-5) Write a linear equation in slope-intercept form given

23)  $m = 3; b = -5$

24)  $m = -4; (3, -7)$

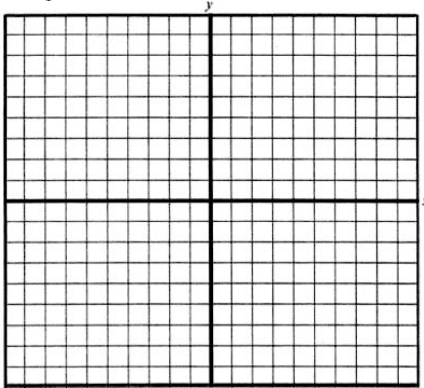
25)  $m = \frac{3}{7}$

26)  $(-2, 8), (1, 2)$

(5-1 to 5-3) Solve each system of equations. Question 27 use the graphing method. #28-31 use Linear Combination.

27)  $y = -x + 2$

$y = 2x + 5$



28)  $6x + 5y = -8$

$2x - 5y = -16$

29)  $x - 3y = 2$

$x + 4y = 16$

30)  $5x - 2y = 0$

$2x - 3y = -11$

31)  $3x + 4y = -25$

$2x - 3y = 6$

32) Mr. Reyes has a farm with 17 ducks and goats. The animals have a total of 44 feet. How many ducks and goats does he have?

(6-1 to 6-3) Solve each inequality and graph the solution.

33)  $5v + 3 > 18$

34)  $-6(n - 3) \leq 42$

35)  $1 + 3r < 5 - r$

36)  $5(m + 2) > 4(m - 1)$

37)  $\frac{3}{2}x - 5 \leq 7$

38)  $5(b - 3) \leq 4b - 8$

39)  $18 - 3y < 0$

40)  $6(c - 5) - 15 > +5(7 - 2c)$