| Aldine 9: Algebra H | lomework #39 | Assigned | Due |
|---------------------|--------------|--------------|------------|
| www.aldine9math.v | weebly.com | A 1/28 Wed | A 1/30 Fri |
| | | B 1/29 Thurs | B 2/2 Mon |
| Name: | Period: | | |

Choose the correct system of equations from the following situations.

1) Chase and Sara went to the candy store. Chase bought 5 pieces of fudge and 3 pieces of bubble gum for a total of \$5.70. Sara bought 2 pieces of fudge and 10 pieces of bubble gum for a total of \$3.60. Which system of equations could be used to determine the cost of 1 piece of fudge, *f*, and 1 piece of bubble gum, *g*?

| Α | 5f + 3g = 3.60 | В | 5f + 2g = 5.70 |
|---|-----------------|---|--------------------|
| | 2f + 10g = 5.70 | | 3f + 10g = 3.60 |
| | | | |
| С | f + a - 22 | n | $5f \pm 3a = 5.70$ |
| C | J + g - 22 | υ | 3j + 3g = 3.10 |
| | 7f + 13g = 9.30 | | 2f + 10g = 3.6 |

2) The number of boys in Ms. Mershimer's classes was 18 less than twice the number of girls. She had a total of 111 students in her classes. Which system of equations will determine the number of boys, b, and the number of girls, g, in Ms. Mershimer's classes?

| A | b = 2(g - 18) b + g = 111 | B | b = 2g + 18 $g = 111 - b$ |
|---|------------------------------|---|---------------------------|
| С | b = 2g - 18 b + g = 111 | D | g = 2b - 18 $b = 111 - g$ |

3) The perimeter of a rectangular garden is 72 feet. Which system of equations can be used to find the dimensions of the garden if its length, L, is 3 times its width, w?

| 2L + 2w = 72 | B | 2L + 2w = 72 |
|----------------------|---|--|
| L = w - 3 | | L = 3w |
| Lw = 72 L = w + 3 | D | L + w = 72 L = 3w |
| | 2L + 2w = 72 L = w - 3 Lw = 72 L = w + 3 | 2L + 2w = 72 B L = w - 3 D L = w + 3 |

4) Jay purchased 3 CDs and 2 pairs of sunglasses for \$336. Will purchased 5 CDs and a pair of sunglasses for \$210. Which of the following models the situation, if x represents the number of CDs and y is the number of sunglasses?

$$\mathbf{F} \begin{cases} 336 = 3x + 2y \\ 210 = 5x + y \end{cases} \qquad \mathbf{G} \begin{cases} 210 = 3x + 2y \\ 336 = 5x + y \end{cases} \qquad \mathbf{H} \begin{cases} 336 = 2x + 3y \\ 210 = x + 5y \end{cases} \qquad \mathbf{J} \begin{cases} 210 = 2x + 3y \\ 336 = x + 5y \end{cases}$$



5) Solve the system by graphing.

y = 3x - 3







7) Based on the tables, where do the 2 lines intersect?

| Line A | | |
|--------|----|--|
| -4 | 16 | |
| -3 | 12 | |
| 0 | 0 | |
| 1 | -4 | |
| 2 | -8 | |

| Line B | | |
|--------|----|--|
| -10 | 28 | |
| -8 | 24 | |
| -6 | 20 | |
| -4 | 16 | |
| -2 | 12 | |

8) Draw a system (2 lines) with no solution, and both lines have a negative slope.

