

## SM2-A HW #7-4 (Analyze Functions)

- 1) Adam and Castel each improved their yards by planting grass sod and geraniums. They bought their supplies from the same store. Adam spent \$76 on 7 ft<sup>2</sup> of grass sod and 6 geraniums. Castel spent \$88 on 14 ft<sup>2</sup> of grass sod and 4 geraniums. What is the cost of one ft<sup>2</sup> of grass sod and the cost of one geranium?
- 2) The school that Darryl goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 3 adult tickets and 14 student tickets for a total of \$218. The school took in \$169 on the second day by selling 13 adult tickets and 1 student ticket. What is the price each of one adult ticket and one student ticket?

**Solve each system by elimination.**

$$\begin{aligned} 3) \quad & -6x + 7y = -30 \\ & x - 7y = 5 \end{aligned}$$

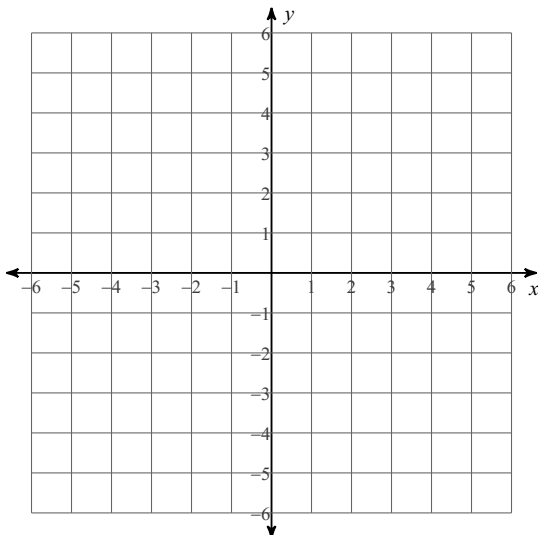
$$\begin{aligned} 4) \quad & -8x - 9y = 0 \\ & -9x - 9y = 0 \end{aligned}$$

$$\begin{aligned} 5) \quad & -8x + 3y = -11 \\ & 9x - 6y = -6 \end{aligned}$$

$$\begin{aligned} 6) \quad & 6x + 8y = -14 \\ & 12x + 16y = -24 \end{aligned}$$

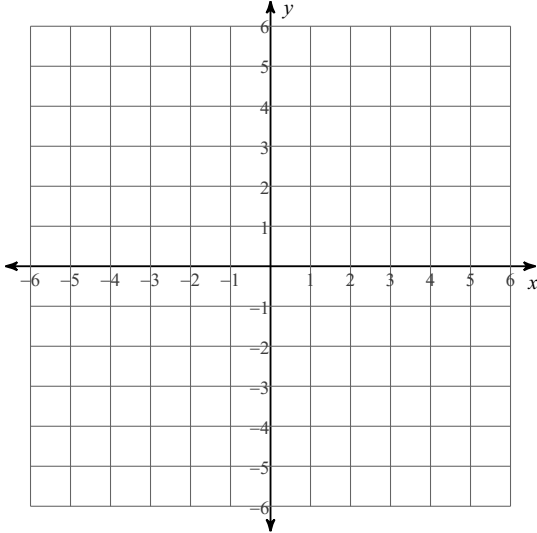
- 7) Describe the function using one (or more) of the following choices.

a) Increasing (b) Decreasing (c) Constant (d) Even (e) Odd (f) Positive (g) Negative



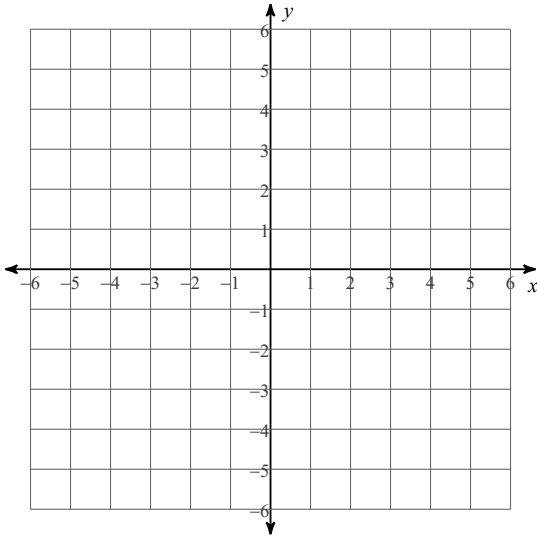
8) Describe the function using one (or more) of the following choices.

- a) Increasing (b) Decreasing (c) Constant (d) Even (e) Odd (f) Positive (g) Negative



9) Describe the function on the interval:  $-3 \leq x \leq 5$  using one (or more) of the following choices.

- a) Increasing (b) Decreasing (c) Constant (d) Even (e) Odd (f) Positive (g) Negative



10) Describe the function using one (or more) of the following choices.

- a) Increasing (b) Decreasing (c) Constant (d) Even (e) Odd (f) Positive (g) Negative

