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Week of $\qquad$ - $\qquad$

Monday

Name: $\qquad$
Period: $\qquad$

Friday

Algebra I - Unit 4: Writing Systems from a Graph or Table Practice - Writing Systems from a Graph or Table
Name $\qquad$ Date $\qquad$ Period $\qquad$

1. The table below represents the amounts charged by car detailers as a function of hours worked. Write let statements and a system of linear equations to represent the two detailers.

| Time (hours) | Desi’s Detail <br> (\$) | Cars R Us (\$) |
| :---: | :---: | :---: |
| 1 | 65 | 95 |
| 2 | 110 | 130 |
| 3 | 155 | 165 |
| 4 | 200 | 200 |
| 5 | 245 | 235 |

Let Statements:

How many hours will it take for the two car detailers to charge the same amount?
2. A. Write the equations for the system of linear equations shown in the graph below.

B. How many solutions are there for this system of linear equations?
3. A. Write the equations for the system of linear equations shown in the graph below.

B. How many solutions are there for this system of linear equations?

## Algebra I - Unit 4: Writing Systems from a Graph or Table

4. An ecologist is studying the populations of two types of fish in a lake. The graph below represents the populations of these fish over five years.

A. Write let statements and the system of linear equations shown in the graph.
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Let Statements:
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B. Compare the population of Fish A to that of Fish B. What is happening to the populations of these fish over time? Justify your answer using complete sentences.
C. Approximately, when are the populations of both types of fish equal?

## Practice - Solving Systems

Name $\qquad$ Date $\qquad$ Period $\qquad$
Write which method you would use to solve each system of equations, substitution, elimination, or graphing. Explain in a sentence WHY you would use that method. Then solve one problem of each method ( 3 total).

1. $y=2 x+2$
$-2 x+y=2$
2. $y=-\frac{2}{3} x+\frac{1}{3}$
$4 x+3 y=11$
3. $y=\frac{1}{3} x+17$
$8 x-y-6=0$
4. $\begin{aligned} & y=-x-5 \\ & y=-x+4\end{aligned}$
5. $\begin{aligned} & -5 x+y=-2 \\ & 2 x+y=5\end{aligned}$
6. $\begin{aligned} & 2 x-y=-9 \\ & -x-2 y=-8\end{aligned}$
7. $\begin{aligned} & 3 x-9 y=12 \\ & -x+3 y=-4\end{aligned}$
8. $\begin{aligned} & -2 x+2 y=6 \\ & 3 x-y=3\end{aligned}$
9. $-3 y=-15$
$x-2 y=-1$
10. $\begin{aligned} & y=-2 x+1 \\ & 2 x+y=10\end{aligned}$
