$\qquad$ Hour: $\qquad$
Standard: A-CED. 2 \& 8.EE.8c. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. Standard: A-CED. 3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.

The Normal Theater holds 385 people, and last night's performance sold out! Children under the age of 17 paid \$3 per ticket, while adults paid \$5 per ticket. Last night's show brought in \$1601.
1.) Define your variables.
2.) Write a system of equations to represent the given information.
3.) How many children tickets were sold?
4.) How many adult tickets were sold?

Name: $\qquad$ Hour: $\qquad$
Standard: A-CED. 2 \& 8.EE.8c. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
Standard: A-CED. 3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context.

The Normal Theater holds 385 people, and last night's performance sold out! Children under the age of 17 paid $\$ 3$ per ticket, while adults paid \$5 per ticket. Last night's show brought in \$1601.
1.) Define your variables.
2.) Write a system of equations to represent the given information.
3.) How many children tickets were sold?
4.) How many adult tickets were sold?

Name: $\qquad$ Hour: $\qquad$
Standard: A-REI.5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.
1.) Solve using substitution.
$7 x-8 y=112$
$y=-2 x+9$
2.) Solve by elimination
$3 x-10 y=-25$
$4 x+40 y=20$

Name: $\qquad$ Hour: $\qquad$
Standard: A-REI.5. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.
1.) Solve using substitution.
$7 x-8 y=112$
$y=-2 x+9$
2.) Solve by elimination
$3 x-10 y=-25$
$4 x+40 y=20$

Name: $\qquad$ Hour: $\qquad$ Standard: A-REI.6. \& 8.EE.8b Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

## Directions: Solve the system by graphing.

1.) $y=x+2$

$$
y=-2 x+2
$$




Name: $\qquad$ Hour: $\qquad$
Standard: A-REI.6. \& 8.EE.8b Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.
/4
Directions: Solve the system by graphing.
1.) $y=x+2$
$y=-2 x+2$



Name： $\qquad$ Hour： $\qquad$
Standard：G．PE． 5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems （e．g．，find the equation of a line parallel or perpendicular to a given line that passes through a given point）．

## Directions：Describe what characteristics you know about the graphs of the equations．

1．）When solved algebraically，I get no solution．

2．）When solved algebraically，I get infinitely many solutions．

## Directions：Describe what you know about the equations of the lines based off the graph．

3．）



Name： $\qquad$ Hour： $\qquad$
Standard：G．PE． 5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems （e．g．，find the equation of a line parallel or perpendicular to a given line that passes through a given point）．

Directions：Describe what characteristics you know about the graphs of the equations．

1．）When solved algebraically，I get no solution．

2．）When solved algebraically，I get infinitely many solutions．

Directions：Describe what you know about the equations of the lines based off the graph．
3．）


