$\qquad$ Date: $\qquad$ Period: $\qquad$ Read all directions.
Algebra 1CP Unit 9 practice test (quadratics) Show your work, and write the answers in the space provided.

1. Find the equation of the Axis of Symmetry for the equation $m^{2}+4 m=-1$.
2. $\qquad$
3. Find the vertex for the equation $m^{2}+4 m=-1$.
4. $\qquad$
5. Fill in the input-output table for the equation $m^{2}+4 m=-1$ and graph in the coordinate plane below.

| $m$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $f(m)$ |  |  |  |  |  |


4. Find the solution(s) of $m^{2}+4 m=-1$ using the Quadratic Formula.
5. Find the equation of the Axis of Symmetry for the equation $x^{2}-4 x+7=0$
6. Find the vertex for the equation $x^{2}-4 x+7=0$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. Fill in the input-output table for the equation $x^{2}-4 x+7=0$ and graph in the $x-y$ coordinate plane below.

| $x$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $f(x)$ |  |  |  |  |  |


8. Find the solution(s) of $x^{2}-4 x+7=0$ by using the quadratic formula.

Find the solution(s) of each equation below by completing the square.
9. $x^{2}+8 x+12=0$
10. $x^{2}-9 x=10$

Write the equation of the parabola in the form requested using the information given.

## 11. Standard form: <br> X-intercepts are -8 and $1 / 4$

## 12. Vertex form:

Vertex ( $-5,8$ ) and Point $(-7,4)$
11. $\qquad$
12. $\qquad$
E.C. Change $y=4(x-3)^{2}-30$ into Standard Form.
8. $\qquad$
9. $\qquad$
10. $\qquad$
E.C. $\qquad$

