Day 8 - Different Forms of Quadratics Practice Assignment

Name:
Date: $\qquad$

Directions: For the table below, identify each characteristic that can be EASILY determined from looking at the equation (requires no calculations). You will not fill in answers for every box.

| Equation | Graph Opens | Vertex | X-Intercepts | Y-Intercept |
| :---: | :---: | :---: | :---: | :---: |
| 1. $y=(x+4)^{2}-5$ |  |  |  |  |
| $2 . y=-2(x+3)(x-2)$ |  |  |  |  |
| $3 \cdot y=-x^{2}+3$ |  |  |  |  |
| 4. $y=x^{2}+5 x-14$ |  |  |  |  |
| $5 \cdot y=-(x+1)^{2}$ |  |  |  |  |
| 6. $y=(x-7)(x+5)$ |  |  |  |  |
| 7. $y=x^{2}+8 x+12$ |  |  |  |  |
| 8. $y=-2(x-3)^{2}+1$ |  |  |  |  |

Convert the following equations to the specific form and give the additional characteristics you can determine from the new form.

| Equation 1 to standard: | Equation 4 to factored: | Equation 6 to standard: | Equation 7 to vertex: |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

Review: Identify the form each quadratic equation is in. Then graph the equations by calculating the vertex and creating an xy chart.
9. Graph $y=(x-4)(x+2)$

Form: $\qquad$

10. Graph $y=x^{2}+4 x-5$

Form: $\qquad$

11. Graph $y=-2(x+3)^{2}-2$

Form: $\qquad$


