$\qquad$ Date $\qquad$ Class $\qquad$

## LEssom Practice B

## 5-3 Solving Quadratic Equations by Graphing and Factoring

Find the zeros of each function by using a graph and a table.

1. $f(x)=x^{2}+5 x+6$

| $x$ | -4 | -3 | -2 | -1 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $f(x)$ |  |  |  |  |  |

2. $g(x)=-x^{2}+4 x+5$

| $x$ | -2 | 0 | 2 | 4 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $f(x)$ |  |  |  |  |  |



Find the zeros of each function by factoring.
3. $h(x)=-x^{2}-6 x-9$
4. $f(x)=2 x^{2}+9 x+4$
5. $g(x)=x^{2}+x-20$

Find the roots of each equation by factoring.
6. $12 x=9 x^{2}+4$
7. $16 x^{2}=9$

Write a quadratic function in standard form for each given set of zeros.
8. -2 and 7
9. 1 and -8

Solve.
10. The quadratic function that approximates the height of a javelin throw is $h(t)=-0.08 t^{2}+4.48$, where $t$ is the time in seconds after it is thrown and $h$ is the javelin's height in feet. How long will it take for the javelin to hit the ground? $\qquad$

