## 2-6 Additional Practice

The Quadratic Formula

Use the Quadratic Formula to solve the equation. Show your work.

1. $x^{2}-15 x+7=0$
2. $3 x^{2}+2 x+1=0$

Use two different methods to solve the equations. Show your work.
3. $x^{2}+4 x-5=0$

Use the discriminant to describe the solutions as one real, two real, or two imaginary solutions.
4. $x^{2}-15 x+12=0$
5. $3 x^{2}-6 x+4=0$
6. Find the value(s) of $k$ that will cause the equation $4 x^{2}+k x+4$ to have zero real solutions, one real solution, or two real solutions.
7. Margaret runs a business. This year's revenue is given by the function $R=-0.5 x^{2}-200 x$. Can her revenue be at least $\$ 25,000$ this year?

