Factoring and Solving Quadratics Self-Test SOL's A.2c, A.4c

Factor the following polynomials.

1. $25-\mathrm{y}^{2}$
2. $7 \mathrm{x}^{2}-7$
3. $x^{2}-24 x+144$
4. $6 x^{2}-24 x+24$
5. $2 y^{2}+7 y-15$

Factor and solve the following.
6. $2 x(x+4)=0$
7. $(x-7)(x-3)=0$
8. $(y+2)(3 y+5)=0$
9. $x^{2}+9=6 x$
10. $\mathrm{x}^{2}-9=0$
11. $x^{2}-6 x=0$
12. $4 \mathrm{~s}^{2}=36 \mathrm{~s}$
13. $2 m^{2}+13 m=24$
14. $x^{2}-6 x-7=0$
15. $6 x^{3}+29 x^{2}+28 x=0$
16. Define a variable and show your equation to solve the following: Find two consecutive odd integers whose product is 143.
17. Use your calculator to find the solutions to $h^{3}+h^{2}-4 h-4=0$. Make a sketch of the graph below.

