Quadratics, Combined

Algorithm
    1.   Try factoring first
    2.   If you can not factor quickly, use the Quadratic Formula
    3.   If the problem is set up as a binomial squared, then use x^2 Method or completing the square

Solve each equation by the method of your choice.

1. $x^2 + 2x = 20$

2. $y^2 + 6y = 6$

3. $3z^2 + 5 = 14z$

4. $2r^2 - 9 = 2r$

5. $2s^2 - 5 = 9s$

6. $7t^2 - 20t = 3$

7. $7v^2 - 12v + 6 = 0$

8. $8u^2 - 2u + 3 = 0$

9. $6w^2 - 1 = 25(w + 2)$

10. $15p^2 + p = 14(3p - 1)$

11. $(x - 5)^2 = 16$

12. $2(x + 4)^2 - 3 = 13$