CP Algebra II
Review for Quadratic Equation TEST

Name _____

Solve the following quadratic equations by ***factoring***.

1) $2g^2 + 18g = 0$

2) $6y^2 - 23y + 20 = 0$

Fill in the blank with the number that correctly completes the square.

3) $w^2 + 22w +$ _____

4) $y^2 - 5y +$ _____

5) $5m^2 + 20m +$ _____

Solve by ***completing the square***.

6) $2n^2 + 12n - 30 = 0$

7) $-3x^2 + 9x = -12$

For the remaining problems, first determine the best method to use (**F** – factoring, **C** –Complete the square or **Q** – quadratic formula), then solve it!

8) $x^2 + 8x - 48 = 0$ method: _____

9) $2y^2 - 3y = 6$ method: _____

10) $x^2 + 2x = 7$ method: _____

11) $4a^2 - 36 = 0$ method: _____

12) $m^2 - 4m + 13 = 0$ method: _____

13) $6w^2 + 9w = 0$ method: _____

14) $d^2 - 5 = 12d$ method: ___Q____

15) $9x^2 - 18x - 1 = 0$ method: ____C____

* let's make this one "time allowing" for extra practice

Now, test your calculator "quad" program to make sure it is running properly. Find the discriminant and the roots (or solutions) to the following equations.

16) $5x^2 - 32x - 21 = 0$

D = _____

roots: _____

17) $8x^2 + 5x = -3$

D = _____

roots: _____