Name_____FA/SA Factoring Quadratics 2 ALPHA Hour _____

Factor each of the following quadratic equations and determine the EXACT solutions to each of the equations

HINT: IF AC > 100, then there might be something special about the quadratic and a FASTER method can be employed!

1. $6x^2 - 11x - 7 = 0$

Completely factored form _____
Related EXACT Solutions _____

2. $2x^2 + 9x + 4 = 0$

Completely factored form _____
Related EXACT Solutions _____

3. $5x^2 - 17x + 6 = 0$

Completely factored form _____
Related EXACT Solutions _____

4. $50x^2 + 250x - 700 = 0$ (hint: do #13 FIRST)

Completely factored form _____
Related EXACT Solutions _____

5. $4x^2 + 16x = 0$

Completely factored form _____
Related EXACT Solutions _____

6. $6x^2 - 24 = 0$

Completely factored form _____
Related EXACT Solutions _____

7. $-4x^2 + 17x = 0$

Completely factored form _____
Related EXACT Solutions _____

8. $-2x^2 + 40 = 0$

Completely factored form _____
Related EXACT Solutions _____

9. $4x^2 - 36x + 81 = 0$

Completely factored form _____
Related EXACT Solutions _____

10. $25x^2 + 10x + 1 = 0$

Completely factored form _____
Related EXACT Solutions _____

11. Give an example of a COMPOSITE quadratic trinomial

12. Give an example of a COMPOSITE quadratic binomial with a GCF that does NOT change the roots of the binomial.

13. Using #4 as an example, explain why factoring out a GCF is the FIRST step in factoring ANY polynomial.

#4 from front page $50x^2 + 250x - 700 = 0$