Name_____ Period _____ Date_____

Regular Advanced Algebra with Trig, Glawe

Solving Trinomials by Factoring and Zero Product Property

Solve each quadratic equation by factoring.

1. $(x-7)(x+9)=0$

2. $(2x+5)(x-1)=0$

3. $2x(3x-1)=0$

4. $x(x-7)=0$

5. $x^2+5x-24=0$

6. $t^2=-18-9t$

7. $16x^2-81=0$

8. $2k^2=-8k-8$

9. $8r^2+3r+2=7r^2$

10. $9x^2-2x-4=-2x$

11. $x^2 + 12x + 10 = -10$

12. $-4n^2 + 6n - 16 = -5n^2$

13. $3b^2 + 3 = 5b$

14. $-2v^2 - v + 12 = -3v^2 + 6v$

15. $3x^2 - 8x = 16$

16. $42x^2 - 69x + 20 = 7x^2 - 8$

17. $3k^2 + 72 = 33k$

18. $7a - 2 = 2a^2$

19. A town has a nature preserve with a regular field that measures 600 meters by 400 meters. The town wants to double the area of the field by adding land as shown. Find the new dimensions of the field.