



SM 2

Name: _____ Period: _____

SM2 6.1 Solving Quadratic Equations by Factoring

1. Explain what the zero product property says.

Find the zeros of each function.

2. $(x-3)(x-6)=0$

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

4. $\frac{1}{4}(x+2)(x+1)=0$

5. $5x^2=0$

6. $-2(x-7)(7x+2)=0$

7. $(7x+3)(8x+1)=0$

8. $x^2+13x+42=0$

9. $x^2-2x-35=0$

10. $-x^2=5x-24$

11. $x^2+7x=0$

12. $x^2-9=0$

13. $16x^2-25=0$

14. $2x^2 - 8x + 8 = 0$

15. $-14x^2 = 10x$

16. $-3x^2 = 18x - 21$

17. $3x^2 - 13x - 30 = 0$

18. $5x^2 + 12 = 16x$

19. $9x^2 + 12x + 4 = 0$

20. A portrait is 9 inches longer than it is wide. The area of the portrait is 360 in^2 . What are the dimensions of the portrait?

21. The length of a garden is 2 feet longer than the width. If the area of the garden is 35 square feet, find the length and the width of the garden.