

**Kerry Ojakian's MTH 28 Class**  
**Class Assignment #9**

Solve.

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

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

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

4.  $(x - 2)(x + 3) = 0$

5.  $(x)(x + 8) = 0$

6.  $(x + 2)(x - 10)(x + 31) = 0$

7.  $(x + 7)(x + 7) = 0$

8.  $(x + 2)(x + 2)(4x) = 0$

9.  $(x + 7)(2x - 1) = 0$

10.  $(7x - 21)(2x) = 0$

11.  $x(x - 1)(5x + 1)(x - 3) = 0$

Solve.

12.  $x^2 - 6x + 8 = 0$

13.  $x^2 + 9x + 18 = 0$

14.  $x^2 - 5x + 6 = 0$

15.  $x^2 - 10 = 3x$

16.  $x^2 + 4x = 12$

17.  $x^2 = 7x + 8$

18.  $(x + 2)(x - 3)(3x - 5) = 0$

19.  $x^2 = 9$

20.  $4x^4 - 20x^3 + 24x^2 = 0$

21.  $12x^3 + 12x^2 = 24x$

22.  $100x^2 = 9$

23.  $x^2 + 15x + 36 = 0$

24.  $5x^2 + 21x + 4 = 0$

25.  $8x^2 + 80x + 200 = 0$

26.  $6x^3 = 24x$

27.  $5x^2 + 4 = 9x$

Application problems.

28. If you square this positive number you get 100. What is the number?
  
  
  
  
  
  
  
  
  
  
29. If you first subtract 1 from this positive number, then square it, you get 25. What is the number?
  
  
  
  
  
  
  
  
  
  
30. The product of two consecutive positive integers is 56. Find the integers.
  
  
  
  
  
  
  
  
  
  
31. The product of two consecutive odd integers is 143. Find the integers.
  
  
  
  
  
  
  
  
  
  
32. The product of two consecutive even integers is 168. Find the integers.
  
  
  
  
  
  
  
  
  
  
33. The area of a rectangular carpet is 28 square feet. The length is three feet more than the width. Find the length and the width of the carpet.
  
  
  
  
  
  
  
  
  
  
34. A rectangular retaining wall has area 15 square feet. The height of the wall is two feet less than its length. Find the height and the length of the wall.