

MATH 0482

Chapter 6.3 Solving Equations Quadratic in Form

SOLVE.

$$12x^2 - 3x = 0$$

$$5x^2 + 8 = 0$$

$$(3x + 5)(3x + 7) = 6x + 10$$

U-SUBSTITUTION...

$$au^2 + bu + c = 0$$

U IS A FUNCTION OF X

Solve.

$$x^4 - 4x^2 - 32 = 0$$

$$x - 2\sqrt{x} - 8 = 0$$

$$x^{\frac{2}{3}} - 3x^{\frac{4}{3}} - 10 = 0$$

$$3y^{-2} + 7y^{-1} - 6 = 0$$

$$\left(\frac{t+2}{t}\right)^2 + 8\left(\frac{t+2}{t}\right) + 7 = 0$$

$$x^4 - 10x^2 + 23 = 0$$

FUNDAMENTAL THEOREM OF ALGEBRA:

AN N^{TH} DEGREE POLYNOMIAL HAS N SOLUTIONS.

FIND ALL ROOTS.

$$f(x) = x^3 - 8$$

$$f(x) = (x-2)^3$$