MATH 0482

Chapter 6.1 Extracting Square Roots and Completing the Square

QUADRATIC EQUATION IN STANDARD FORM... $ax^2+bx+c=0$

SQUARE ROOT PROPERTY... IF $x^2=N$, THEN $x=\pm\sqrt{N}$.

SOLVE.

$4x^2-9=0$

$9x^2-8=0$

$x^2+25=0$

$(x+5)^2=9$

$2(x-2)^2-5=0$

COMPLETING THE SQUARE...

$(x+5)^2$

$ax^2+bx+c=0$

NOTE: $a=1$

COMPLETE THE SQUARE

$x^2-6x+\_\_\_\_=(x+\_\_\_)^2$

$x^2+x+\_\_\_\_=(x+\_\_\_)^2$

SOLVE BY COMPLETING THE SQUARE.

$x^2 - 8x - 2 = 0$

$x^2 + 2x - 48 = 0$

$x^2 - 10x + 26 = 0$

$x^2 + 3x + 4 = 0$

$2x^2+5x-1=0$

$3x^2-2x+1=0$