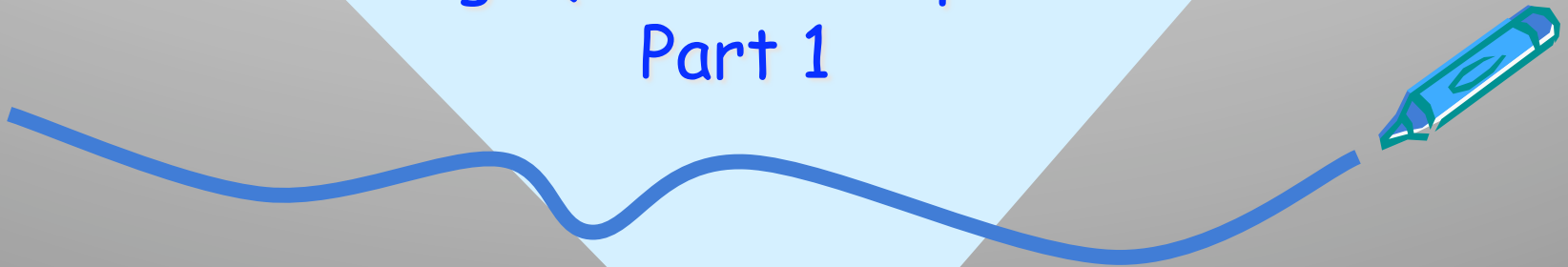


Ch 10.4

Solving Quadratic Equations: Part 1



Solving Quadratic Equations Using Square Roots

You can solve equations of the form $x^2 = a$ by finding the square roots of each side. Ex. $x^2 = 36 = \pm\sqrt{36} = +/-6$

- First isolate the variable
 - Then take the sq rt of each side.
- *Remember there are positive and negative solutions w/ sq rts.

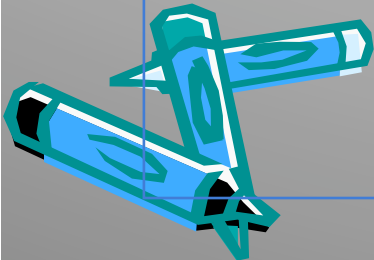
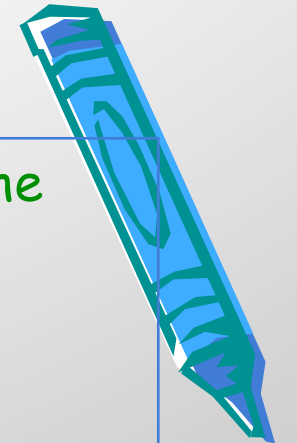
Examples: 1. $t^2 - 25 = 0$ $t^2 = 25$ $\sqrt{t^2} = \pm\sqrt{25}$
 ± 5

2. $2x^2 + 2 = 0$ $2x^2 = -2$ $x^2 = -1$ $\sqrt{x^2} = \sqrt{-1}$

When taking the sq rt of a negative #:

No solution

3. $3n^2 + 12 = 12$ $3n^2 = 0$ $n^2 = 0$
 0



Try some

Solve.

1. $2x^2 - 2 = 0$

2. $3x^2 - 75 = 0$

3. $2g^2 + 32 = 0$

4. $49q^2 = 9$ (leave in fraction form)

