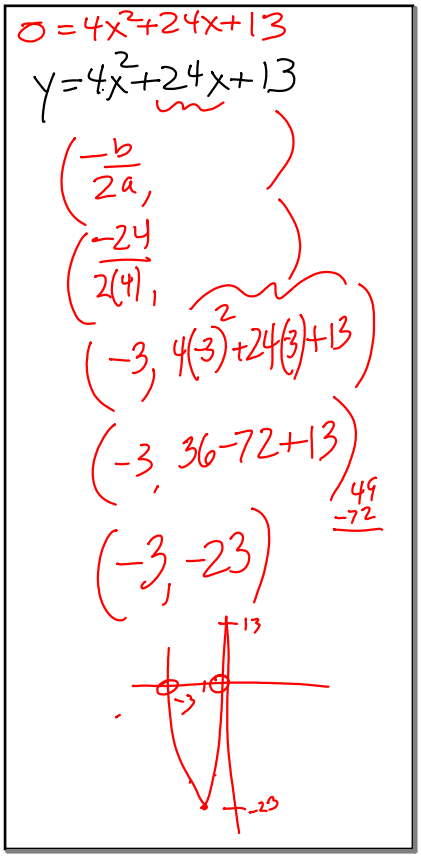
Algebra 1

Our Goal: To review for the Chapter 8 quiz

Warm Up: Please have your computers out and on

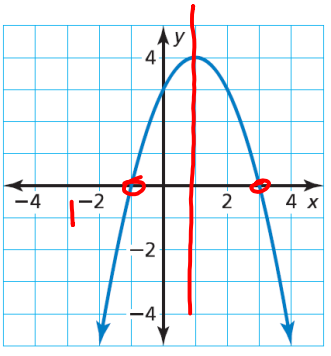
Today's Homework
Textbook Practice Quiz

Previous Homework
8.3 Exercises, p.436-437: 4-30 (evens)

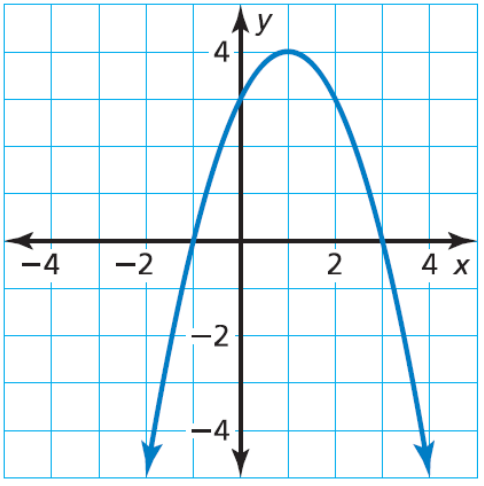


Chapter 8 Quiz Topics

- Characteristics of a quadratic function
  - > Vertex
  - > Equation of axis of symmetry
  - > Interval where increasing / decreasing
  - > y-intercept
  - > x-intercept(s) or zeros
  - > Domain / Range
  - > min/max value
- Finding the vertex of a parabola
- Determining the direction of opening
- Determining the width compared to $y=x^2$
- Graphing parabolas



V: (1, 4)
A.O.S.: $1 = x$
incr $x < 1$
decr $x > 1$
y-int 3
zeros −1, 3
D/R domain → all real numbers
range → $y \leq 4$
width to $y = x^2$ same
min or max value



$p(x) = 2x^2 + 2$

V: (0, 2)

AOS: x=0

axis of symmetry

incr x>0

decr x<0

y-int: 2

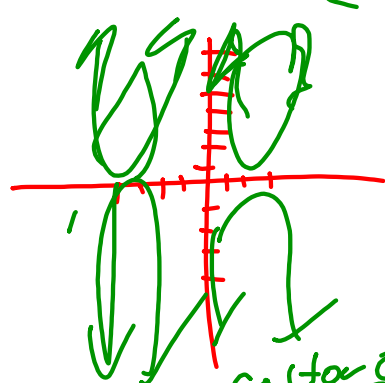
zeros none

Dom./Rang

all real

y ≥ 2

min/max value 2



factor of 2

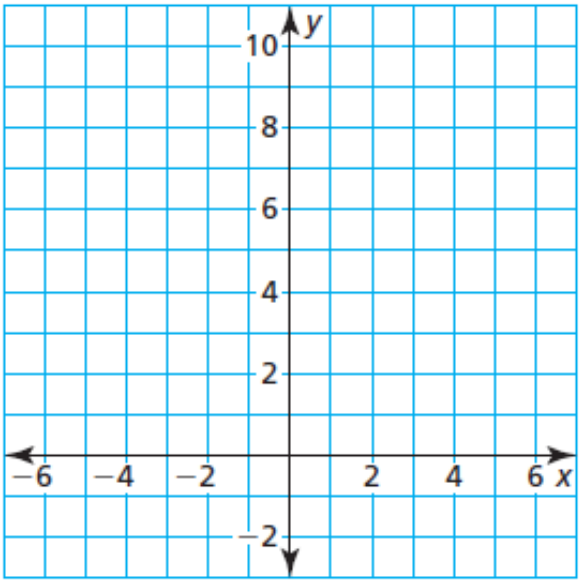
width narrower/same

y=y²

wider

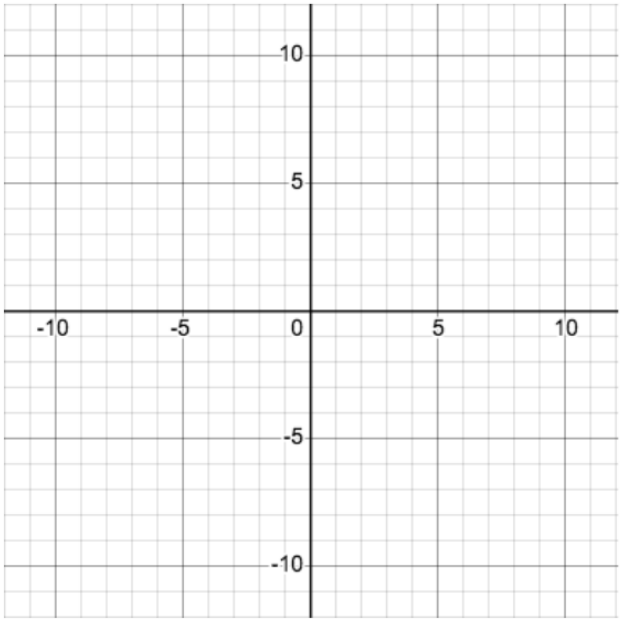
(st)udying

$p(x) = 2x^2 + 2$



$y = x^2 + 4x - 5$

$$y = x^2 + 4x - 5$$



February 29, 2024