

Review for Exam 3

Section 3.5

stretching, shifting, reflecting of graphs

piece-wise functions

graphing

word problems

Section 3.6 Parabolas

Standard form:

$$y = a(x - h)^2 + k$$

$$\text{Vertex : } (h, k)$$

Quadratic form:

$$y = ax^2 + bx + c$$

$$\text{Vertex : } x\text{-coord} = -\frac{b}{2a} \quad \text{or find average of } x\text{-int.}$$

plug in to find y

Word problems

Section 3.7

Add, subtract, multiply, divide two functions

Composition of functions $f \circ g$

Word problems

Section 4.6

directly proportional $y = kx$

inversely proportional $y = \frac{k}{x}$

word problems

Section 2.7

Solving inequalities using a sign chart

Section 4.1

Using a sign chart to graph polynomials with degree more than 2

Section 9.1

Solving a system of equations using substitution

Section 9.2

Solving a system of equations using elimination

Word problems