2. Writing Functions in Vertex form -
a.  b. 

***SAT WARM-UP*:** The sum of integers x and y is 495. The units digit of x is 0. if x is divided by 10, the result is equal to y. What is the value of x?

a. 40
b. 45
c. 245
d. 250
e. 450

**Vocabulary**

vertex form

1. Vertex Form of Quadratic:

Vertex:

Axis of Symmetry

if a>0 the graph opens up
if a<0 the graph opens down

h is the horizontal translation
x-h moves to the right
x+h moves to the left

k is the vertical translation
+k moves up
-k moves down

a is the dilation

|a|>1 stretched vertically (thinner)
|a| is a fraction compressed vertically(wider)

3. Writing an Equation, given a graph (Use vertex and substitute point)

a.



 b.

This new function is called (f+g)(x)

5. In Class Practice # 1-7



4. Graphing from vertex form



6. Honors Group Work



 4b. 



Practice at Home: 4.7 #9,11,13,19,22,26,33,36,37,42