17. The following quadratic relation is given in vertex form: $y=-\frac{1}{2}(x+5)^2-6$

a) Identify $a=$_____, $p=$_____, $q=$_____

b) State the direction of opening of the parabola:_____

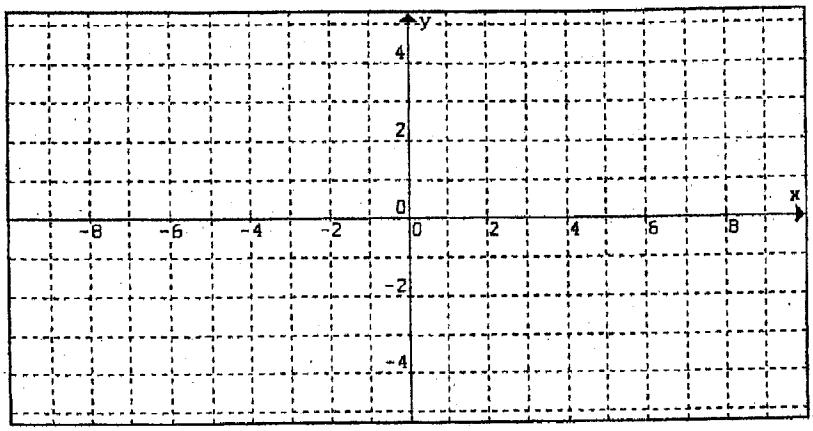
c) Identify the coordinates of the vertex: _____

d) Is there a maximum or a minimum value? _____

e) What is the max/min value? _____

f) axis of symmetry: _____

18. Sketch the graph of $y=3(x+5)^2-4$. Show all steps and label each parabola.



18. COM [/4] APP [/4] To find the distance AB across a pond, surveyors measured the distances shown in the diagram below.

a) State which triangles are similar, and then PROVE your claim.

b) Calculate the distance AB.