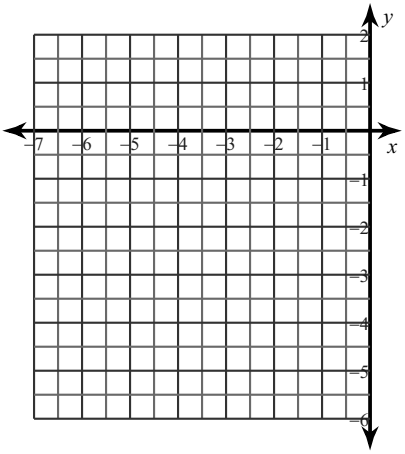
Algebra 1 Name_____

Parabola Review

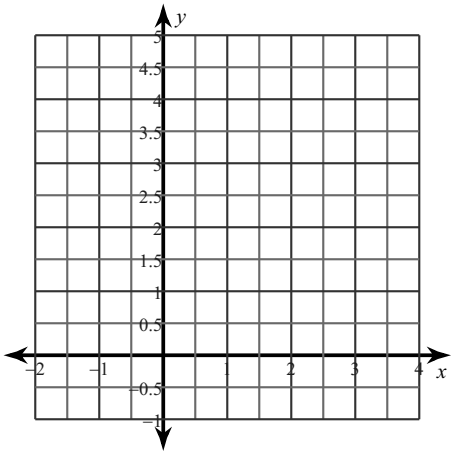
Date_____ Algebra____

Sketch the graph of each function.

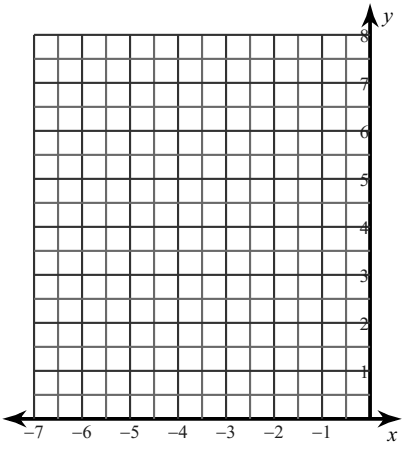
1) $y = x^2 + 8x + 12$



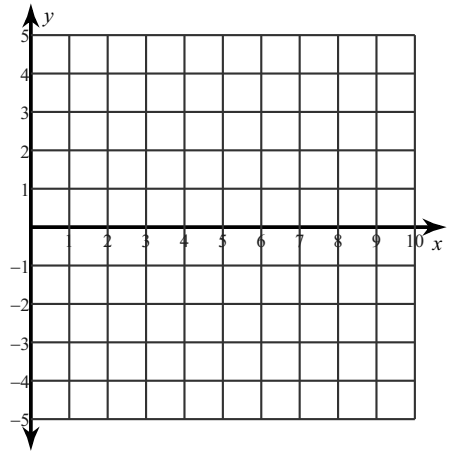
2) $y = -x^2 + 2x + 3$



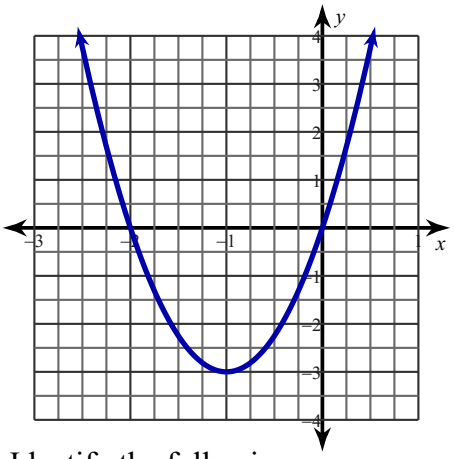
3) $f(x) = x^2 + 8x + 19$



4) $f(x) = 2x^2 - 8x + 4$



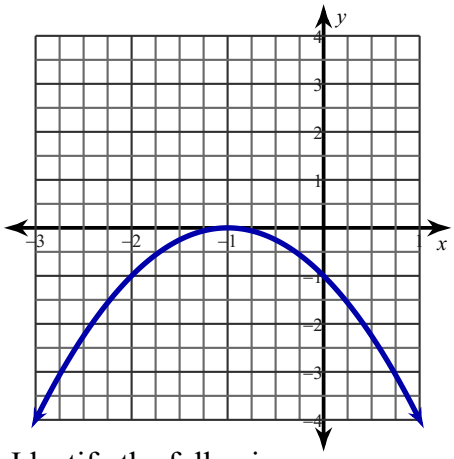
5)



Identify the following:

VERTEX:
ROOTS:
AOS:

6)



Identify the following:

VERTEX:
ROOTS:
AOS:

Find the VERTEX, AOS and ROOTS algebraically:

7) $9n^2 = 5$

8) $4a^2 - 40 = 6a$

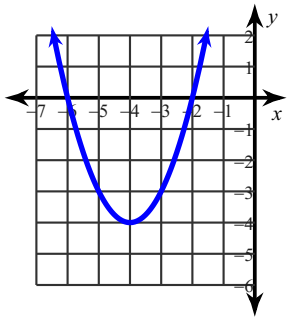
Evaluate the discriminate for the following and state what it tells you about the parabola:

9) $2n^2 = 3n + 35$

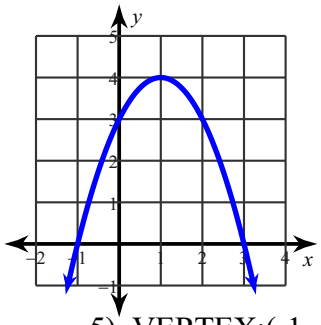
10) $n^2 - 55 = 6n$

Answers to Parabola Review

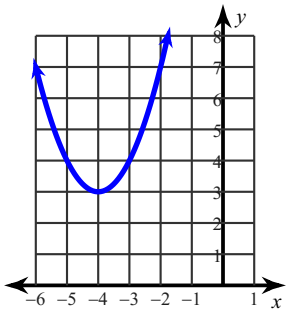
1)



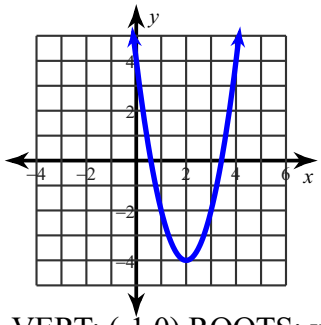
2)



3)



4)



5) VERTEX:(-1, -3),ROOTS: x = -2, 0, AOS: x = -1

6) VERT: (-1,0),ROOTS: x = -1, AOS: x = -1

7) $\{0.745, -0.745\}$

8) $\{4, -2.5\}$

9) $\{5, -3.5\}$

10) $\{11, -5\}$