

Analyze #1

Name _____

Date _____

Advanced Algebra

I can analyze a graph #1

Assignment #10

1) Graph $y = 2(x-3)^2 + 5$

a) State the y intercept _____

b) State the x intercept _____

c) Does this function have a maxima or minima? If so identify them

d) Using proper math terminology what is the domain?

e) Using Proper math terminology what is the range?

f) For what x values is $f(x)$ increasing?

g) For what x values is $f(x)$ decreasing?

j) What is $f(2)$

2) Draw the graph $y = (x-3)^3 + 2$

a) State the y intercept _____

b) State the x intercept _____

c) Does this function have a maxima or minima? If so identify them

d) Using proper math terminology what is the domain?

e) Using Proper math terminology what is the range?

f) For what x values is $f(x)$ increasing?

g) For what x values is $f(x)$ decreasing?

j) What is $f(2)$

l) Given $y-y_1=m(x-x_1)$ What is the equation of the line NORMAL to the curve at $x=2$?

