Name_____
Date_____

Advanced Algebra
Unit 2: Families of Functions
Homework #5

Given $f(x) = 4x-5$ and $g(x) = x^2+2$

1. Find f(6) _____

2. find f(0) _____

3. Find x if f(x) = 22 _____

4. g(5) _____

5. g(-2) _____

6. f(8) + g(2) _____

7) 5* f(7) _____

8) Find x if g(x) = 27 _____

9) f(12) - g(6) _____

10) Describe with a short answer what happens to $f(x) = (x-5)^2-6$

The parent family is _____
The horizontal shift is _____
The vertical shift is _____

Sketch your graph here:

What is the x intercept?

What is the y intercept?

Does this function have a maxima or minima? If so what?

I can solve:

Solve the following equations:

11) $0= 3(x-2)^3 -5$

12) $0= (x-2)^2-28$ (should be 2 answers)

13) $0=2|x - 18|-22$ (Should be 2 answers)

14) $0= 4(x - 5)^{\frac{1}{3}}$

LT: I understand function notation:

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

Find f(4)

What is x when f(x) = 108?

16) $f(x) = 3(x-4)^3+18$

Find f(2)

Find x when f(x) = 205

17) Given the general function y= f(x), describe what the following does to the original graph

a) y=f(x) -18

b) y= f(x)+ 32

c) y= f(x-5)

d) y= f(x-4) + 9

e) y= 4f(x)