Review Worksheet #2

1. If  find:
a)  b)  c) d) e )

2. For each graph, evaluate  at the following values of  then, then state the domain and the range of 

a)  b)  c)  d) 

3. Find the slope and the intercept of each line

a)  b)  c) 

4. Sketch the graph of each function. State the domain

a)  b) 

c)  d) 

e)  f) 

5. Translate into interval notation .

a) b) c) d)

6. Rewrite the interval notation as an inequality

a) b)$x\in (2,22]$ c) d)

7. State any restrictions on the domain of the variable  for each function

a)  b) $y=\frac{1}{x-3}$

c) $t\left(x\right)=\frac{1}{4+x}$ d) $y=\frac{x}{(x-2)(x+3)}$

e) $y=\frac{x}{x^{2}-5x-24}$ f) $h\left(x\right)=\frac{x-2}{x^{2}-5x}$

g) $f\left(x\right)=\sqrt{x}$ h) $y=\sqrt{x^{2}-16}$

8. Find an equation of the line with each set of characteristics.

a) slope 3, passing through (1, 2)

b) *x*-intercept 2, *y*-intercept 3

c) passing through (1, 2) and (2, -2)

d) passing through (2,3) and vertical

e) passing through (-2,-1) and horizontal

9) State whether each function is even, odd, or neither.

10) Determine whether each function is even, odd, or neither.

a) f(x) = x6 b) y = x5  c) f(x) = x + x4

d) f(x) = $\frac{2}{x^{4}+12}$ e) y= $\frac{x}{1+x}$ f) g(x) = x5 +$ \frac{2}{x}$

g) s(t) = $\frac{t^{2}}{t^{4}+2t^{2}-t}$ h) y= |x3|

11. Calculate  for each of the following