Key/Ruth's answers for #1 & 2

Quiz 0

This is a two-stage quiz. During the first stage, use your knowledge & calculator. You have 15 min. In the second stage, you are now welcome to use your books, notes, and students in the class to retake the same quiz. You have the remainder of the quiz time to write one solution (with everyoneÕs name on it!!!) to be turned in for the group.

1. [2] What do you want the instructor to know about you?
   If this is stage 2 of the quiz, what do you want other students to know about you?
   (There could be one thing shared by everyone or separate items.)

   I am a working parent.
   Work is important to be but I want it balanced with family friends, and my own interest.

2. [3] What characteristics do you think make a good student. Which do you have?
   If this is stage 2, there could be one thing listed by everyone or separate items.

   Willingness to work with others, (I have)
   Time management (I have)
   Reviewing mistakes & learning from (I struggle with this)

3. [2] Let a and b be real, non-zero numbers. Add $\frac{1}{a}+\frac{1}{b}$.

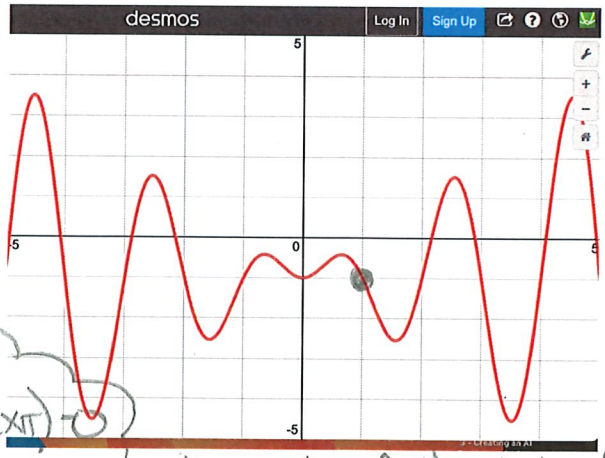
   $\frac{b}{b}\frac{1}{a}+\frac{1}{b}\frac{a}{a}=\frac{b}{ba}+\frac{a}{ba}$

   common den (+1) maintain ratio (+1,5)

   If used # +1

   $=\frac{a+b}{ba}$ got it (+1,5)

4. [3] Find the equation of a line that is tangent to $f(x)=x\sin(x\pi)-1$ when $x=1$.
   Note that the graph of f is graphed below.
   Provide work so that it can be easily followed.



Looking for $y-y_1=m(x-x_1)$ (+1,5)

m = slope of line tangent to f @ x = 1

$= f'(1)$

product rule (+1)

$f'(x)=x\cos(x\pi)\cdot\pi+\sin(x\pi)\cdot 1$

chain (+1,5)

$=1\cos(\pi)\cdot\pi+\sin(1\pi)$ (+1,5)

$=(-1)\pi+0=-\pi$

thru $(1, f(1))=(1, 1\sin(\pi)-1)$

$=(1,-1)$

So $y+1=-\pi(x-1)$ (+1,5)