MATH-130

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Name: \_\_\_\_\_\_\_\_\_

Practice Quiz 3B

We will be looking at transformations of functions and how they impact the graph.

1. Take a look at f(x) = x^2. Sketch it.
   1. Move this graph 2 units to the right, and write the new equation.
   2. Now, move this graph 3 units up, and write the new equation.
   3. Finally, stretch the graph by a factor of 2. What is the new graph?
   4. Sketch all the transformations on the board.
2. Take a look at f(x) = x^(½) +3. Sketch it.
   1. Move this graph 4 units to the left, and write the new equation.
   2. Now, move this graph 2 units down, and write the new equation.
   3. Now, stretch the graph by a factor of 1/2. What is the new graph?
   4. Finally, reflect it across the x axis
   5. Sketch all the transformations on the board.

Now, we will look at the word problem on the board.

The graph of temperature is given on the board and is defined as function T(t) = -(t-4)^2 + 80. Find the following and state it as a function of time:

Note: (At t=0, the time is high noon)

1. Temperature at 2PM
2. Temperature at 3PM
3. Temperature at 7PM
4. Average change in temperature from High Noon to 9PM
5. What is the maximum temperature of this fine day?
6. What is the domain and range of time and temperature?