## Expectations

The following is also necessary for an assignment to be graded.

- Homework is due at the beginning of the class period. Homework should be turn-in at the beginning of class, in my office, or in Math Building room 108 (instructor name must appear on the top of the first page). After 3 minutes into the class period, homework is considered late.
Homework is NOT accepted after the due date. If you did not attend class - homework is still due.
- Do your homework on regular $8.5 \times 11^{\prime \prime}$ notebook paper. You may write on both sides of the paper. DO NOT HAND IN ANY ASSIGNMENT WITHOUT RIPPING OFF THE FRINGED EDGE.
- Name is placed on the top right hand side of the paper.
- The chapter and section should be clearly marked and each problem identified.
- Multiple pages must be stapled together. No creative folding techniques, please.
- Handwriting must be legible. You will not be given credit for problems that are not legible. If your handwriting is illegible, you will be given a warning, after which I will no longer accept your assignments. Avoid excessive scratch-outs.
- You must write the problem. (For story problems, summary is acceptable.)

A guideline: you don't have to open the book to know what the problem was asking you do to. This includes the expression or function that is in the problem. Each problem is to be written neatly.

- Show all work neat and organized. Answers must be easily found. Highlight, circle, or box your final answer. Work must include all the intermediate steps included and the problem number clearly marked. Written explanations should be included wherever appropriate. Include units on answers.
- At least one space between problems for instructor's comments.
- Graphs must be labeled with the window clearly marked. Title, axis labeled, units clearly indicated. Your tick marks must have values when appropriate.
- All story problems must have a sentence for the final answer (Include answer, units and what it is you found in the context of the problem.)
- Matching and T/F must have a mathematical reason. The choice it is the last one left is not a mathematical reason. Must verify that the match is correct.
- Have correct answer, with well-explained reasons. You must justify your answers. There is no one word answers.

True or False questions: you need to explain your choice.
Matching questions: you must explain in words why you feel this is the correct match.

- Partial credit will also be given. Just because you have written something doesn't mean you get credit. I have to find something correct in the work.
- Answers must show understanding; the written work has much more than detail than Webassign.

You are strongly encouraged to discuss homework problems with me, tutors, and especially each other. However, you are expected to write up your own solutions. Remember, the important part of this whole process is LEARNING.

Guidelines for Writing in Math:

- Write as if the reader does not already know what you want to say. Assume that the reader is a classmate who does not understand the problem or how to do it. This assumption will encourage complete and clear answers. The reader can only see what you wrote, not what you meant to say.
- Avoid vague words like "it". Most problems contain many quantities. "It" does not tell which quantity you are referring to. The meaning may be clear to you, but not necessarily to the reader.
- Define any symbol you use that was not introduced in the problem.
- Always use complete and proper mathematical notation. Avoid the misuse of symbols, especially the equal sign. The equal sign states that the expressions on both sides of the equation represent the same thing. The equal sign does not mean, "the next step is", "means", or "the answer is".
- If you used a graphing calculator in your solution, explain your process.

If you used a graph to solve, you must draw the graph and give full detail and information.

## 1.1

\#17. Find the equation of a line passing through $(2,1)$ and is $\perp$ to the line $y=5 x-3$
Answer
Slope of the given line is 5 so the perpendicular slope is $-1 / 5 \quad m=5$ so $m_{\perp}=-\frac{1}{5}$
Formula for an equation of a line given a slope and a point $\left(x_{1}, y_{1}\right)$ is $y=m\left(x-x_{1}\right)+y_{1}$
You must state slope and point.
So substituting into the formula where: $m=(-1 / 5), x_{1}=2$ and $y_{1}=1$

$$
\begin{aligned}
y & =\frac{-1}{5}(x-2)+1 \quad \text { (This answer is acceptable.) } \\
\text { Simplifying } \quad y & =\frac{-1}{5}(x)+\frac{2}{5}+1 \\
y & =\frac{-1}{5} x+\frac{7}{5}
\end{aligned}
$$

\#39 An object is put outside on a cold day at time $t=0$. Its temperature $\mathrm{H}=f(t)$ is ${ }^{\circ} \mathrm{C}$ is

a) What does the statement $f(30)=10$ mean

Answer: 30 minutes after the object was placed outside the temperature of the object is 10 degrees Celsius.
b) What is the vertical intercept and horizontal intercept and explain what they mean. Remember to include units.

## Answer:

$a$ is the vertical intercept ( $0, a$ ) means that object was at temperature $a{ }^{\circ} \mathrm{C}$ when initially placed outside. $b$ is the horizontal intercept ( $b, 0$ ) means that at time ( $b$ ) minutes after the object was placed outside the object's temperature is $0^{\circ} \mathrm{C}$.
\#58 Look at the detail of this Graph


Work
Distance: Detroit to Kalamazoo 275-120 = 155 miles
The vertical has distances that are important to the problem. The horizontal has activities that indicate the time. So sometimes the values are not exact numbers. Place the important values on the axis. Do not make tick marks.

