1) Sketch a graph of the following equations.
   a) \( y = 8 - \frac{5}{3}x \)

   - \( y = 8 - 3 \)
   - \( y = 3 \)

   b) \( 4x - 3y + 15 = 0 \)

2) Find the equation of the line that passes through the given points:
   a) \( A(2, 7) \quad B(5, -3) \)

   - \( m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{7 - 3}{2 - 5} = \frac{4}{-3} = -\frac{4}{3} \)
   - \( y = -\frac{4}{3}x + 5 \)
3) Three lines $l_1$, $l_2$, and $l_3$ are graphed below. As you learned in this unit, each line has an equation of the form $y = c + dx$.

a. Describe the value of $d$ in the equation of the line $l_1$.
Assume that the scale on the y-axis is the same as the scale on the x-axis.

\[ \frac{\Delta y}{\Delta x} = \frac{6}{0} \]
Slope is undefined

$y = 4$

b. Compare the value of $d$ in the equation of $l_3$ to the value of $d$ in the equation of the line $l_1$.

$0$ in $l_3$ is negative and $\text{positive}$ than $-1$

(0, 0.5)$

\( d \) is negative and less than one

c. Determine the value of $d$ in the equation of line $l_2$.

\( d \) is a y-intercept line (ex: $y = 2$)

\( d = 0 \)

Zero slope

\( d \) in the equation of line $l_2$.

Not reciprocals

Just opposite

\( d \) in the equation of the line $l_1$.

d. Are the values of $c$ equal in the equations of any two of the three lines $l_1$, $l_2$ and $l_3$? Explain your answer.

The values of $c$ are equal in $l_1$ and $l_2$ because $c$ is the y-intercept and both those lines cross there.

Yes
4) Four minutes after turning an oven on to pre-heat it, Pat observed the oven temperature was 290°F. Two minutes after that, the temperature was 400°F. **Represent these data on a graph.**

a. Assuming the oven temperature increases at a constant rate, determine the rate of change in the temperature over time.
b. Using $x$ to represent minutes since the oven was turned on, express the temperature of the oven, $f$, as a function of time.
c. Using your function equation, what was the temperature of the oven the moment it was turned on?
   Support your answer.
d. When Pat walked past the oven a while after turning it on, she noticed that the temperature read 482.5°F.
   Use your function equation to determine how long the oven has been on.
   Organize your work, and support everything graphically.

\[ x = \text{time} \]
\[ y = \text{Temp (°F)} \]

**Temperature as a function of time:**

\[ a) \frac{dy}{dx} = \frac{400 - 290}{6 - 4} \]
\[ = \frac{110}{2} \]
\[ = 55 \]

\[ b) f(x) = 55x + 70 \]

\[ c) \text{The temperature was 70°F} \]

\[ d) f(482.5) = 55(482.5) + 70 \]
\[ = 26531.5 + 70 \]
\[ = 26601.5 \]

\[ y = 482.5 - 55x - 70 \]
\[ y = 55x + 70 \]

\[ f(0) = 55(0) + 70 \]
\[ = 70 \]
<table>
<thead>
<tr>
<th></th>
<th>(Check any boxes that apply.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Written Work</strong></td>
<td></td>
</tr>
<tr>
<td>My work is ORGANIZED and easy to follow.</td>
<td>x x x x x x x x x x x x x</td>
</tr>
<tr>
<td>My work is correct and complete; includes support, multiple approaches, graph/table, whenever possible.</td>
<td>x x x x x x x x x x x</td>
</tr>
<tr>
<td>I used MATH NOTATION flawlessly.</td>
<td>x x x x x x x x</td>
</tr>
<tr>
<td><strong>Mathematical Methods</strong></td>
<td></td>
</tr>
<tr>
<td>I used the appropriate mathematical method to answer this question. (I applied what was taught for this section.)</td>
<td>x x x x x x x x x x x x</td>
</tr>
<tr>
<td>I SUCCESSFULLY used the appropriate mathematical method to answer this question. (I correctly applied what was taught for this section.)</td>
<td>x x x x x x x x</td>
</tr>
<tr>
<td><strong>Evidence of Comprehension</strong></td>
<td></td>
</tr>
<tr>
<td>I attempted to support my work.</td>
<td>x x x x x x x x</td>
</tr>
<tr>
<td>I correctly supported my work. If my answer was wrong, I may not have had a chance to change my answer, but I made it clear I knew I was wrong.</td>
<td>x x x x x x x x</td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td></td>
</tr>
<tr>
<td>I did work just like this for homework.</td>
<td>x x x x x x x x x x x</td>
</tr>
<tr>
<td>I did work like this for homework, and I checked it to make sure I was right.</td>
<td>x x x x x x x x x x</td>
</tr>
<tr>
<td>I did work like this for homework, I checked it, AND I posted it to my homework file.</td>
<td>x x x x x x x x x x</td>
</tr>
</tbody>
</table>

Copy and paste your goals from the previous assessment (unless this is the first assessment of the year) below:

I would like to watch more videos put on the Haiku page in order to help me on future math problems and tests.

*Answer each question with “yes” or “not really”:*
I did what I said I would do in my previous goals. **yes**
Following through with my goals helped me improve. **yes**

What **specific** goals will you set to improve future work:
(“Do more homework”, “try harder”, and “ask more questions” are not specific goals.)
I would like to be able to work well and work faster during my tests so I can finish my test during the class.

What did you do well? What should you continue to do to ensure repeated success?

I did very well in understanding this section and watching the videos can help me during the upcoming chapters.

- **Test Score 19-21**  
  NDA Grade A+  
  - All the qualities of excellence are demonstrated throughout the test  
  - Student goes beyond the normal expectations to communicate a unique method  
  - Difficult problems are solved correctly and justified clearly and logically

- **Test Score 16-18**  
  NDA Grade A  
  - Excellent work. Achieving the standard for all major topics assessed  
  - All or mostly all work is clear, concise, and fully supported  
  - Efficient and elegant mathematical methods are applied when appropriate  
  - Clear evidence of deep levels of comprehension exists throughout  
  - Notation is flawless.

- **Test Score 13-15**  
  NDA Grade A-/B+  
  - Very good work. Achieving the standard for almost all of the major topics assessed  
  - Most work is clear and supported, some work or support is incomplete or incorrect  
  - Efficient and elegant mathematical methods are applied through much of the paper  
  - Routine and traditional-style math problems are correct.  
  - Evidence of comprehension exists  
  - Notation is relatively flawless

- **Test Score 10-12**  
  NDA Grade B  
  - Good work. Achieving the standard for the majority of major topics  
  - Some work is clear and well supported, but in several cases limited or no support is provided  
  - Efficient mathematical methods are applied through some of the paper  
  - Routine and traditional-style math problems are mostly correct.  
  - Some evidence of comprehension exists, but in some cases results were incorrect and the error went unnoticed (revealing potential lack of understanding)  
  - Notation is good in some cases, but in some cases misapplied notation becomes a distraction

- **Test Score 7-9**  
  NDA Grade C  
  - Minimally achieving the standard/“In the ballpark” on some topics.  
  - Work is often unsupported  
  - Some mathematical methods applied, but it is clear that some of the methods being assessed were not learned or mastered at this point  
  - Reasonable evidence of understanding in some places, gaps in comprehension exist, many errors went unnoticed  
  - Communication is clear in some places, incomplete in others

- **Test Score 4-6**  
  NDA Grade D  
  - Routine/basic problems are not done correctly  
  - Major gaps in logic and/or comprehension are clearly evident  
  - Communication is lacking  
  - Notation errors minimal/no attempt to apply conventions to written work
Test Score 1-3
NDA Grade F
- Forget to do it. Leave blank. Don’t try.

Student perception of score on a 1-21 scale **10**
(No partial points, please; 15.5 is not an acceptable score.)

Rubric rating submitted on: 11/28/2018, 2:12:17 PM by dguyette@notredameacademy.com

| Score | 10 | 99 | 98 | 97 | 96 | 95 | 94 | 93 | 91 | 89 | 87 | 85 | 83 | 81 | 79 | 76 | 73 | 69 | 65 | 59 | 52 |
|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| YOUR SCORE: | 87 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

Comments: