**MATH 115 Quiz 5** NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Professor: Dr. Izmirli

**INSTRUCTIONS**

* The quiz is worth 100 points. There are ***five*** problems (each worth 20 points).
* This quiz is ***open book*** and ***open notes***. This means you may refer to your textbook, notes, and online classroom materials. You may take as much time as you wish, provided you turn in your quiz no later than the **due date posted in our syllabus**.
* **You must show all work in order to receive full credit. If you do not show your work, you may earn only partial or no credit at the discretion of the professor.**
* Emailed quizzes and exams will not be accepted (they crash my email system). Thank you for understanding.
* If you have any questions, please feel free to email me at: Ilhan.Izmirli@faculty.umuc.edu

Best of luck! ☺

**MULTIPLE CHOICE Select the best answer choice. Write your answer choices below:**

* 1. **\_\_\_\_\_**
	2. **\_\_\_\_\_**
	3. **\_\_\_\_\_**
	4. **\_\_\_\_\_**
	5. **\_\_\_\_\_**

1.The solution(s) of the equation

$$2cos^{2}x tanx=tanx$$

over the interval $[0, 2π]$ is (are)

1. $x=0$
2. $x=0, π$
3. $x=0, \frac{π}{4}, \frac{3π}{4}, π, \frac{5π}{4}$
4. $x=0, \frac{π}{4}, \frac{3π}{4}, π, \frac{5π}{4}, \frac{7π}{4}$
5. None of the above.

2.If in a triangle $QSR$, we have $q=15$, $r=28$, and $Q=43°$, then $s$ is

 (a) $22.5$

 (b) $42$

 (c) $43$

 (d) $17.81$

 (e) None of the above.

3. If in a triangle $RST$ we have $r=3.5$, $s=4.7$, and $t=2.8$, then $T≅$

1. $95.9°$
2. $47.8°$
3. $54°$
4. $36.3°$
5. $141.2°$

4.Forces of $10$ Newtons and $20$ Newtons act on an object at right angles to each other. The magnitude of the resultant force is

1. $15$.36 Newtons
2. $17.3$4 Newtons
3. $19.45$ Newtons
4. $21.15$ Newtons
5. $22.36$ Newtons

5.If $u=<-2, 1>$ and $v=<3, 2>$, then $-7u+3v$ is

1. $<23, -1>$
2. $<13, 3>$
3. $<17, -11>$
4. $<5, -1>$
5. $<13, -3>$