**Grading rubric:   Partner Test  (Student Rubric)**

| | 0 | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| Components of 1a<br>• Computes integral correctly with work/ justification<br>• Correctly interprets meaning of the value in context. | | | | | |
| Components of 1b<br><br>• Correctly evaluates $c(t)$<br>• Uses values from c(t)  appropriately  to compute  TC(t) | | | | | |
| Components of part 1c:<br>• Correctly gets values for  $H(t)$ , with justification<br>• Graph clearly and accurately depicts relationship between $t$ and $H(t)$. | | | | | |
| Components of part 1d:<br>• Gets correct values for nc(t)<br>• Graph clearly and accurately depicts relationship between $t$ and $H(t)$. | | | | | |
| Components of  part 1e:<br>• Answers the question posed .<br>• Explains how to arrive at the answer using both  graph from part c and graph from part d. | | | | | |
| **Communication / Organization**<br>• Use of notation / terms is correct and  appropriate throughout.<br>• Work is clear, organized, easy to read, and easy to follow. | | | | | |
| **Preparation**<br>• Duties are shared<br>• Materials are accessible | | | | | |

Rubric for teachers (do NOT give to students)

1a. This integral = ((500+700)/2)(1) = 600. (calls/hour)(hour) = #calls came in during the first hour

- (2) Computes integral correctly. with work/ justification
- (1)Understands Integral = " new calls that come in"
- (1) Includes "During the first hour."

1b.

- (1) Correctly gets all of the correct values for c(t)
- (2) Using a Clear/ correct method, Uses values from c(t) appropriately to compute TC(t)
- (1) Accuracy: all values for c(t) and TC(t) are correct.

1c.

- (1) Correctly evaluates $H(t)$ in the table
- (1) Shows good work for how to get $H(t)$
- (1) Graph accurately depicts relationship between $t$ and $H(t)$
- (1) Axes labeled, units included

1d.

- (1) Computes $nc(t)$ correctly for each value of t.
- (1) Graph accurately depicts relationship between $t$ and $H(t)$.
- (2) Axes labeled, units correct.

1e.

- (1) Identifies the value of $t$ which maximizes # people on hold .
- (1) Identifies how to make this conclusion from the graph in part c.
- (2) Correctly justifies how to use graph in 1d to make same conclusion.

Communication

- (2) Use of notation / terms is correct and appropriate throughout.
- (2) Work is clear, organized, easy to read, and easy to follow.

Collaboration / Use of resources

- (2) Both partners show evidence of contributing to the task in a substantive way.
- (2) Partners show evidence of using existing resources in an effective way.