MATHEMATICS OPEN-RESPONSE QUESTIONS

Read all parts of each open response question before you begin. Write your answers to the open response questions in the space provided in this test booklet. For each open response question, use the grid provided in the test booklet to create any required charts or graphs. If a question does not require a chart or graph, write your written response over the grid lines.

Write your answer to question 1 in the space provided on the next page.

Doctor's Office Direct Variation

For parts A,B & C, explain your reasoning or support answer with work. A doctor can see 10 patients in 2.5 hours.

A. How many patients can be seen in 1 hour?

1.

- B. How many patients could the doctor see in 8 hours?
- C. If the doctor sees 88 patients, how many hours did he work?
- D. Mathematically describe the relationship between the number of patients and hours?

Do not write on this page. Please write your answer to this open-response question on the next page.

PLEASE GO ON TO THE NEXT PAGE ->

Doctor's Office

Direct Variation Scoring Guide / Key

A.10 patients divided by 2.5 hours = 4 patients per hour w/ support B. 4 patients per hours (8 hours) = 32 patients w/support C. 88 divided by 4(patients per hour) = 22 hours w/support	1 point
No support or explanation − ½ point for each A,B,C.	
D. This relationship is a direct variation ~ hours increase, patients increase1	point

Scoring Guide

- **4** -Student scores 4 points.
- **3** -Student scores 3 points.
- **2** -Student scores 2 points.
- 1 -Student scores 1 point.

- 4 = Student correctly and completely answers all parts.
- 3 = Student answers all parts with minor error in one part.
- 2 = Student answers all parts with minor errors in two parts.
- 1 = Student correctly answers at least one part.
- 0 = Incorrect Response.

Blank = No attempt.