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.

PTO T-Shirt Fundraiser
Inverse Variation

1.

RCHS PTO wishes to purchase an Ellison Press cutting system for the teachers' workroom. They need to raise approximately $5,000 for the complete super size set-up.

    a. They have 10 people willing to help with the project. Approximately how much money would each be responsible to raise?

    b. Create a table of values to show what would happen if they could get 20 people to help? 50 people? 100 people? **n** people?

    c. Mathematically describe the relationship between the number of people and the amount of money each will need to raise.

Do not write on this page. Please write your

answer to this open-response question on

the next page. ☞

PTO T-Shirt Fundraiser
Inverse Variation
Scoring Guide / Key

a. $5000/10$ people = $500 each

b.

# people	$ each
20	250
50	100
100	50
n	5000/n

c. Inverse variation OR as the number of people increases, the amount each must raise decreases

d.