4

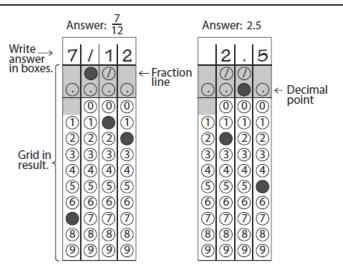


4

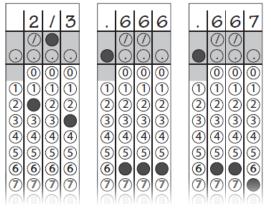
#### DIRECTIONS

For questions 28-31, solve the problem and enter your answer in the grid, as described below, on the answer sheet.

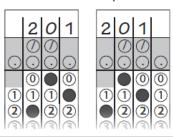
- Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately. You will receive credit only if the circles are filled in correctly.
- 2. Mark no more than one circle in any column.
- 3. No question has a negative answer.
- Some problems may have more than one correct answer. In such cases, grid only one answer.
- 5. **Mixed numbers** such as  $3\frac{1}{2}$  must be gridded as 3.5 or 7/2. (If 3|1|/|2| is entered into the grid, it will be interpreted as  $\frac{31}{2}$ , not  $3\frac{1}{2}$ .)
- Decimal answers: If you obtain a decimal answer with more digits than the grid can accommodate, it may be either rounded or truncated, but it must fill the entire grid.



Acceptable ways to grid  $\frac{2}{3}$  are:



Answer: 201 - either position is correct



NOTE: You may start your answers in any column, space permitting. Columns you don't need to use should be left blank.

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CONTINUE

4



4

28

Type of meal	Fat (g)	Carbohydrates (g)
Stir-fry	4	40
Szechuan chicken	5	35

A grocer carries two types of frozen meals that have the fat and carbohydrate content shown in the table above. John wants to purchase a combination of the two types of meals with no more than 350 grams of fat and no more than 2975 grams of carbohydrates. If John purchases 10 Szechuan chicken meals, what is the greatest number of stir-fry meals he can purchase so that the combination will satisfy the requirements?

29

$$y = x^2 - 4x + 3$$
$$y = x - 1$$

If (x, y) is a solution to the system of equations above, what is one possible value of the product of x and y?

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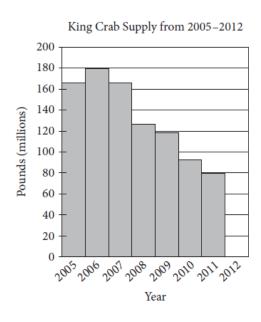
CONTINUE

4



4

### Questions 30 and 31 refer to the following information.



The graph above shows the supply, in millions of pounds, of king crab harvested and sold from 2005 to 2011. The information for the year 2012 is not included in the graph.

30

In 2006, the price of king crab was \$8 per pound at the beginning of the year and dropped to \$7 per pound toward the end of the year. If 60% of the king crab supply was sold at the higher price per pound and the rest was sold at the lower price per pound, what was the total revenue generated, in millions of dollars, from the sales of king crab in 2006? (Disregard the \$ when gridding your answer.)

31

In 2011, the price of king crab was \$17 per pound. In 2012,  $x ext{ million}$  pounds of king crab were sold at \$16 per pound. If the total money generated from sales each year was the same, what is the value of x?

### **STOP**

If you finish before time is called, you may check your work on this section only.

Do not turn to any other section.

#### **Answers**

Black letter after answer indicates difficulty level (e = easy, m = medium, h = hard).

### MATH TEST - CALCULATOR

28.	65	h	
29.	0,12	h	
30.	1368	h	
31.	85	h	