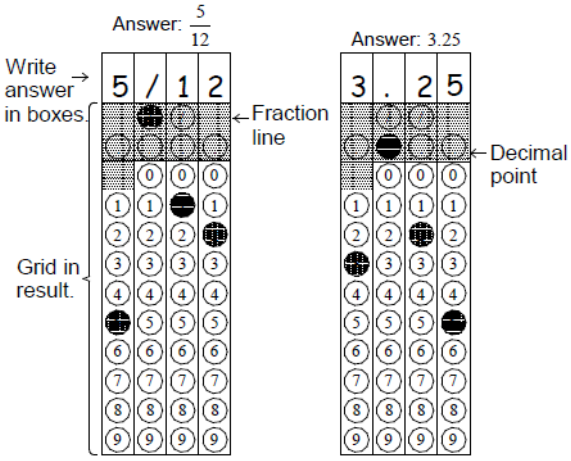
SAT Grid In

4  **4**

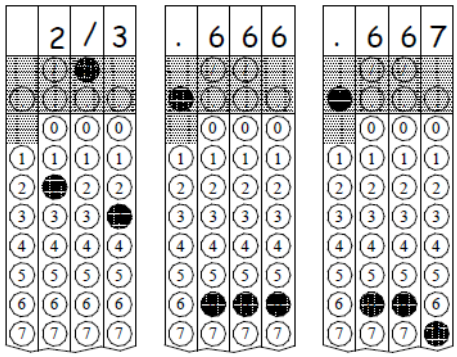
DIRECTIONS

For questions 31-38, solve the problem and enter your answer in the grid as described below, on the answer sheet.

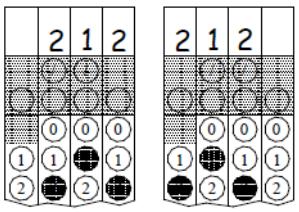
1. Although not required, it is suggested that you write your answer in the boxes at the top of the columns to help you fill in the circles accurately. You will receive credit only if the circles are filled in correctly.
2. Mark no more than one circle in any column.
3. No question has a negative answer.
4. 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  is entered into the grid, it will be interpreted as $\frac{31}{2}$ not $3\frac{1}{2}$.)
6. **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: 212 - either position is correct.



NOTE: You may start your answers in any column, space permitting. Columns you use should be left blank.

CONTINUE

SAT Grid In

31

Real numbers a and b are positive, and the ratio of a to b is 2.25 times the ratio of b to a. What is the value of $\frac{a}{b}$?

32

$$\frac{2}{5}x - \frac{1}{5}y = 98$$

$$\frac{2}{7}x + \frac{1}{14}y = 55$$

If the ordered pair (x, y) satisfies the system of equations shown above, what is the value of x?

33

$$p(x) = \frac{2x-1}{(x-4)^2 - 6(x-4) + 9}$$

For what value of x is the function above undefined?

34

When Jay was on vacation in China, the exchange rate for Chinese yuan to US dollars was 6.14 yuan per dollar. On her vacation in China, Jay bought two one-day Beijing tour tickets for 320 yuan each. To the nearest dollar, how many dollars did the two tickets cost?
(Disregard the $ sign when gridding your answer.)

SAT Grid In

35

If $x^4 \cdot x^9 = x^n \cdot x^n$, what is the value of n?

36

In the xy-plane, a parabola with the equation $y = -(x+3)^2 + 9$ intersects a line with the equation $y = -7$ at two points, P and Q. What is the length of $\overline{PQ}$?

37

$$y = a(x+3)(x-5)$$

In the quadratic equation above, a is a nonzero constant. The graph of the equation in the xy-plane has the vertex (h,k). If the value of k is -8, what is the value of a?

38

If $(x+2)$ is a factor of $f(x) = x^3 + x^2 + x + c$, and $(-1, p)$ lies on the graph of f, what is the value of p?

SAT Grid In

Answers

SAT Practice Test 1 – Calculator

31. 1.5 32. 210 33. 7 34. 104 35. 6.5

36. 8 37. $\frac{1}{2}$ or 0.5 38. 5