

Mastering the SAT: Section by Section

The Math Section – SAT

The math section is 70 minutes long and composed of both multiple choice questions and student-produced response questions. Luckily, only 10 are student produced. In this section, you may find questions dealing with numbers and operations, algebra, geometry and data analysis among others. Students are allowed to use their calculators, but some restrictions apply. Permitted calculators include ones that are scientific, graphic and four-function.

1. Amy works in a bakery Monday through Friday. On Monday, she sold 29 muffins during her shift. On Tuesday, she sold 12 muffins. On Wednesday, she sold 14. On Thursday she sold 26. On Friday, she sold 29 muffins. If m represents the number of muffins sold most frequently that week, q represents the median number of muffins sold, and a represents the average (arithmetic mean) number of muffins sold each day, which of the following is the correct order of m , q , and a ?
 - a. $m < a < q$
 - b. $a < q < m$
 - c. $q < m < a$
 - d. $a = m < q$
 - e. $q < a < m$

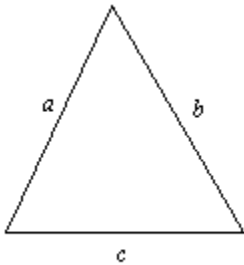


figure not drawn to scale

2. In triangle abc , pictured above, the length of side a is 7 and the length of side b is 10. Which of the following could be the perimeter of the triangle?
 - a. 17
 - b. 36
 - c. 23
 - d. All of the above
 - e. None of the above

3. If $g \& h = (g - h)^{(g - h)}$, what is $4 \& (4 \& 3)$?
 - a. 1
 - b. 3
 - c. 4
 - d. 9
 - e. 12

Mastering the SAT: Section by Section

4. A line l intersects points (1, 2) and points (5, 10). What could be the equation of a line perpendicular to l ?
- $y = -\frac{1}{2}x$
 - $y = -x + 2$
 - $y = \frac{1}{2}x - 2$
 - $y = 2x$
 - $y = -2x$
5. The University of Selectivity had an acceptance rate of 20 percent for the year 2006, with an incoming class of 300 freshmen. Between 2006 and 2007, the number of applications they received increased by 30 percent, but the number of students admitted remained the same. Rounded to the nearest percent, what is the university's acceptance rate for 2007?
- 20%
 - 10%
 - 15%
 - 7%
 - 17%

Answers:

- b
- c
- d
- a
- c