

COLLEGE ENTRANCE EXAM PRACTICE



FOCUS ON SAT MATHEMATICS SUBJECT TESTS

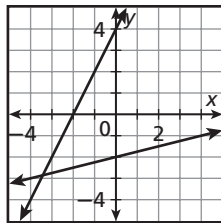
In addition to the SAT, the SAT Mathematics Subject Tests are required by some colleges for admission. Colleges that don't require the SAT Mathematics Subject Tests may still use the scores to learn about your academic background and possibly place you in the appropriate college math class.



Take the SAT Mathematics Subject Tests while the subject matter is fresh in your mind. You are not expected to be familiar with all the content covered on the tests, but you should have completed at least three years of college-prep math.

You may want to time yourself as you take this practice test. It should take you about 6 minutes to complete.

1. Which of the following systems of equations is represented by the graph?



(A)
$$\begin{cases} y = -2x + 4 \\ y = \frac{1}{4}x + 2 \end{cases}$$

(B)
$$\begin{cases} y = 2x - 4 \\ y = -\frac{1}{4}x - 2 \end{cases}$$

(C)
$$\begin{cases} y = 2x + 4 \\ y = \frac{1}{4}x - 2 \end{cases}$$

(D)
$$\begin{cases} y = \frac{1}{2}x + 4 \\ y = 4x - 2 \end{cases}$$

(E)
$$\begin{cases} y = \frac{1}{2}x - 4 \\ y = 4x + 2 \end{cases}$$

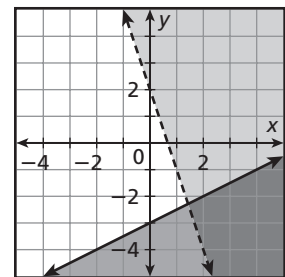
2. If $x - 2y = 1$ and $2x - y = -4$, then $x + y = ?$

- (A) -9
- (B) -7
- (C) -5
- (D) -3
- (E) -1

3. In a fruit salad, there are two more bananas than apples and eight times as many cherries as apples. If a total of 22 pieces of fruit are used, how many of each type are in the salad?

- (A) 2 apples, 4 bananas, 18 cherries
- (B) 2 apples, 4 bananas, 16 cherries
- (C) 2 apples, 0 bananas, 20 cherries
- (D) 4 apples, 2 bananas, 12 cherries
- (E) 4 apples, 8 bananas, 32 cherries

4. Which of the following inequalities is NOT graphed in the figure?



- (A) $y > -3x + 2$
- (B) $2y \leq x - 6$
- (C) $0.5x \geq y + 3$
- (D) $3x + y \geq 2$
- (E) $6x + 2y > 4$

5. If $r = 3s + 1$ and $t = s - 4$, then what is r in terms of t ?

- (A) $3t + 13$
- (B) $t + 4$
- (C) -2.5
- (D) $3t + 5$
- (E) $3t + 1$