

SATPREP

Assignment : *System of Equations*

Easy

- $y = x + 1$ and $x + 2y = 8$, what is the value of x ?
 - 1
 - 2
 - 3
 - 2
- There are 25 high school seniors who are taking the total of 112 AP classes this year. Some of them take 4 APs and the others take 5. How many seniors are taking 5 APs?
 - 11
 - 12
 - 13
 - 14
- At the school cafeteria, there are 30 tables and each table can seat either 2 or 4 students. If there are a total 80 students in one of the lunch sections, how many tables must seat exactly 4 students in this lunch section?
 - 9
 - 10
 - 11
 - 12
 - 13
- What is the value of x if $x + 2y = 6$ and $x + y = 5$?
 - 2
 - 3
 - 4
 - 5
- If $3a - b = 3$ and $a + 2b = 15$, then $a + b$?
 - 2
 - 4
 - 9
 - 5

Medium

6. If $\frac{x}{w} = 28$ and $5yw = 3$, then $xy = ?$

$$\begin{aligned}3x - 4y &= 8 \\5x + 3y &= 23\end{aligned}$$

7. Based on the above system of 2-equations, which of the following values will $(x + y)$ equal?

- a) 10
- b) 8
- c) 7
- d) 5

8. If $2x - 3y = 11$ and $x = y + 4$, what is the value of x ?

9. If $5 \leq x \leq 7$ and $-3 \leq y \leq 1$, which of the following gives the set of all possible values of xy ?

- a) $-15 \leq xy \leq 7$
- b) $0 \leq xy \leq 7$
- c) $-21 \leq xy \leq 5$
- d) $-21 \leq xy \leq 7$

10. If $3x - z = 2y$ and $3x + 5y - z = 28$, what is the value of y ?

- a) 3
- b) 4
- c) 5
- d) 6

11. There is \$180 of cash in John's pocket. John only has 10 and 20 dollar bills. If John has a total of 13 bills, how many 20 dollar bills are in his pocket?