TB(2B) Ch. 7 Linear Equation in 2 Unknowns
Multiple Choice Questions

1. [13-14 St. Test 2 #3]

Solve $1 = \frac{2x+y}{7} = \frac{2y-3x}{-7}$.

A. $x = 1, \quad y = 5$
B. $x = 3, \quad y = 1$
C. $x = 4.2, \quad y = -1.4$
D. $x = 21, \quad y = -35$

2. [13-14 St. Test 2 #4]

How many solution(s) is/are there for the simultaneous equations $\begin{cases} 5x-3=2y \\ 15x-6y=9 \end{cases}$?

A. 1 solution.
B. 2 solutions.
C. No solution.
D. Infinitely many solutions.

3. [13-14 St. Test 2 #8]

$A(-2, 9)$ and $B(2, 1)$ lie on the graph of $y = ax - b$. Find the coordinates of the point where the graph cuts the x-axis.

A. (0, 5)
B. (0, –5)
C. (2.5, 0)
D. (–2.5, 0)

4. [13-14 Final Exam #9]

The price of 6 apples and 2 oranges is $228. If the price of 4 apples is the same as the price of 5 oranges, then the price of an orange is

A. $24. **B.** $27.
C. $30. **D.** $65.

5. [14-15 Mid-Year Exam #10]

Which of the following points lies on the graph of $3x + 4y + 5 = 0$?

A. $(-1, 2)$ **B.** $\left(-\frac{1}{3}, -1\right)$
C. $\left(0, \frac{5}{4}\right)$ **D.** $\left(3, \frac{7}{2}\right)$

6. [13-14 S.6 Mock Exam #17]

Solve $\begin{cases} \frac{12}{x}+\frac{24}{y}=2 \\ \frac{6}{x}-\frac{12}{y}=-5 \end{cases}$.

A. $x = 3, y = -4$
B. $x = 3, y = 4$
C. $x = -3, y = -4$
D. $x = -3, y = 4$

7. [14-15 Standardized Test #1]

Solve the simultaneous equations $2x-1=y-4=x+y$.

A. $x=-4,\ \ y=-5$
B. $x=-2,\ \ y=-7$
C. $x=2,\ \ y=7$
D. $x=4,\ \ y=5$

8. [14-15 Standardized Test #7]

Which of the following statements about $L: 3x + 2y = 5$ are true?

I. $(4, -3.5)$ lies on the graph of L.
II. L and $3x + 2y = 7$ has one solution.
III. Infinitely many pairs of values of x and y can satisfy L.

A. I and II only.
B. I and III only.
C. II and III only.
D. I, II and III.

9. [14-15 S.6 Mock Exam #5]

6 years ago, the age of a father was 5 times the age of his son. 1 year from now, the age of the father will be 3 times the age of his son. The present age of the father is

A. 41.
B. 43.
C. 45.
D. 47.

10. [14-15 Final Exam #9]

Solve $\begin{cases} 3x + 6y = 7 \\ x - y = 2 \end{cases}$.

A. $x = 1,\ y = \frac{2}{3}$

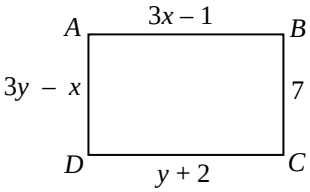
B. $x = 2,\ y = 1$

C. $x = \frac{19}{9},\ y = \frac{1}{9}$

D. $x = -\frac{19}{9},\ y = \frac{1}{9}$

11. [15-16 Final Exam #10]

The figure shows a rectangle *ABCD*. Find *DC*.



A. 2
B. 3
C. 5
D. 7

12. [15-16 Standardized Test #1]

How many solution(s) is/are there for the simultaneous equations $\begin{cases} x - 2y = 3 \\ \frac{7x}{4} - \frac{21}{4} = \frac{7y}{2} \end{cases}$?

A. No solution
B. 1 solution
C. 2 solutions
D. Infinitely many solutions

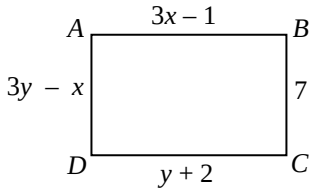
13. [15-16 Standardized Test #7]

If *P* (3, 9), *Q* (*c*, 11) and *R* (1, 5) lie on the graph of $y = ax + b$, find the value of *c*.

A. 1
B. 2
C. 4
D. 7

14. [15-16 Final Exam #10]

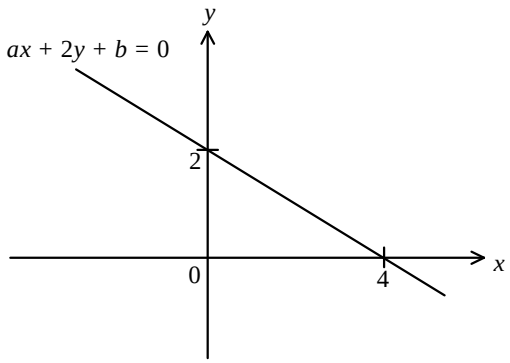
The figure shows a rectangle *ABCD*. Find *DC*.



A. 2
B. 3
C. 5
D. 7

15. [16-17 Standardized Test #9]

The figure shows the graph of the equation $ax + 2y + b = 0$. Find the values of *a* and *b*.



A. $a = 1, b = -4$
B. $a = 1, b = 2$
C. $a = 2, b = 4$
D. $a = 4, b = 2$

16. [16-17 Final Exam #9]

The age of Ashley is twice that of Billy now. Three years later, the sum of their ages will be 24. What is Ashley's age now?

A. 6
B. 9
C. 12
D. 15

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