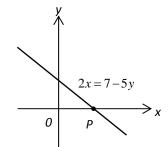
TB(2B) Ch. 7 Linear Equation in 2 Unknowns Multiple Choice Questions

1. [11-12 Mid-year Exam -9]

In the figure, the line 2x = 7 - 5y intersects the x-axis at P. Find the coordinates of point P.



- **A.** (0, 1.4)
- **B.** (0, 3.5)
- **C.** (1.4, 0)
- **D.** (3.5, 0)

2. [11-12 STest2]

How many solution(s) is/are there for the simultaneous equations $\begin{cases} x - 2y = 3 \\ 2x - 4y = 9 \end{cases}$?

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

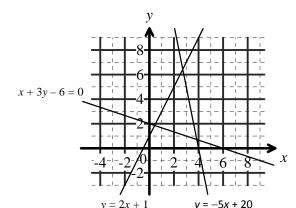
3. [11-12 STest2]

If the graphs of 3x - Ay = 2B and Bx - 2y = A intersect at (1, -1), find the values of A and B.

- **A.** A = -1, B = 1
- **B.** A = 7, B = 5
- C. $A = \frac{7}{3}, B = \frac{1}{3}$
- **D.** $A = -\frac{1}{3}, B = -\frac{5}{3}$

4. [11-12 Final Exam #7]

By using the graphical method, the solution to the simultaneous linear equations $\begin{cases} x + 3y - 6 = 0 \\ y = -5x + 20 \end{cases}$ is



5. [11-12 Final Exam #8]

For the solution to the simultaneous linear equations $\begin{cases} 2x + 3y = -7 \\ x - y = 4 \end{cases}$, which of the following is correct?

A.
$$x = 1$$

A. (4, 1).B. (0, 2).C. (3, 6).

D. (3.8, 0.7).

B.
$$x = -3$$

C. There is no solution.

D. There are an infinite number of solutions.

6. [12-13 S. Test 2, 4]

The prices of an orange and an apple are \$4 and \$6 respectively. A sum of \$80 is spent on buying some oranges and apples. If the total number of oranges and apples bought is 15, find the number of oranges.

7. [12-13 S. Test 2, 6]

How many solution(s) is/ are there for the following simultaneous equations?

$$\begin{cases} 7(x-1)+10(y+1) = -2\\ 4(y+1)-3(x-1) = 5 \end{cases}$$

D. Infinitely many solutions

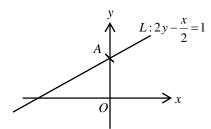
[12-13 Final Exam #7]

In the figure, straight line L cuts the y-axis at A. Find the coordinates of A.



- **B.** (2, 0)
- C. (0, 2)

$$\mathbf{D.} \quad \left(0, \frac{1}{2}\right)$$



[12-13 Final Exam #15]

How many solution(s) is/ are there for the following simultaneous equations?

$$\begin{cases} 2x + 3y = 5\\ 4x + 6y = 10 \end{cases}$$

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

10. [12-13 Mid-year Exam #8]

Which of the following ordered pairs satisfies the equation 4y - 3x = 7?

- (1, -1)

- C. $\left(\frac{17}{3}, \frac{10}{4}\right)$ D. $\left(\frac{10}{3}, \frac{17}{4}\right)$

11. [12-13 Mid-year Exam #18]

If P(4, 2) and Q(0, 6) both lie on the graph of y = ax + b, find the value of a.

- **A.** -1
- **B.** −2
- C. 2
- **D.** 3

12. [13-14 St. Test 2 #3]

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

A.
$$x = 1$$
, $y = 5$

B.
$$x = 3$$
, $y = 1$

C.
$$x = 4.2$$
, $y = -1.4$

D.
$$x = 21$$
, $y = -35$

13. [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.

14. [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)
- $\mathbf{C}.\ (2.5,0)$
- **D.** (-2.5, 0)

15. [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.

16. [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.** $\left(3, \frac{7}{2}\right)$

17. [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.
$$x = -3, y = 4$$

18. [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.
$$x = 4$$
, $y = 5$

19. [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.

20. [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.

21. [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.
$$x = -\frac{19}{9}, y = \frac{1}{9}$$

22. [15-16 Final Exam #10]

The figure shows a rectangle ABCD. Find DC.

$$\begin{array}{c|cccc}
A & 3x-1 & B \\
3y-x & 7 & 7 \\
D & y+2 & C
\end{array}$$

- A.
- **B.** 3
- **C.** 5
- **D.** 7

23. [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

24. [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

~ End ~