

## Description

10. Solving linear equations

Testing | Multiple choice

1 2 3 4 5 6 7 8 9 10

**Q1                      10. Solving linear equations | Testing | Multiple choice | Page 1**How would you solve the equation  $a - 2 = 5$  by graphing?

Graph  $y = a - 2$ , and  
**A.** find where it crosses the  $x$ -axis.

Graph  $y = a - 2$  and  
**B.**  $y = 5$ , and find where they cross the  $y$ -axis.

Graph  $y = a - 2$  and  $y = 5$ , and find the coordinates of the point of intersection. The  $y$ -coordinate of the intersection point is the solution.

Graph  $y = a - 2$  and  $y = 5$ , and find the coordinates of the point of intersection. The  $a$ -coordinate of the intersection point is the solution.

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**Q1**                      **10. Solving linear equations | Testing | Multiple choice | Page 2**

Bobby solved the equation  $x + 3 = 3(x + 5)$  by entering  $x + 3$  in Y1 and  $3(x + 5)$  in Y2 and making a table. Which table shows the correct solution, and why?

**A.**

X	Y1	Y2
-5	-2	0
-4	-1	3
-3	0	6
-2	1	9

The solution is -3, because Y1 is 0 there.

**C.**

X	Y1	Y2
-7	-4	-6
-6	-3	-3
-5	-2	0
-4	-1	3

The solution is -3, because Y1 and Y2 are the same there.

**B.**

X	Y1	Y2
-7	-4	-6
-6	-3	-3
-5	-2	0
-4	-1	3

The solution is -6, because Y1 and Y2 are the same there.

**D.**

X	Y1	Y2
-10	-7	-15
-8	-5	-9
-4	-1	3
-2	1	9

The solution is -4, because Y1 is -1 and Y2 is 3 there.

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**Q1**                      **10. Solving linear equations | Testing | Multiple choice | Page 3**

Solve the equation  $x + 8 = 16$ .

**A.**  $x = -8$

**D.**  $x = 8$

**B.**  $x = -2$

**E.**  $x = 24$

**C.**  $x = 2$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 4**

Solve the equation  $\frac{2}{3}a = 30$ .

- A.  $a = 6$
- B.  $a = 15$
- C.  $a = 20$
- D.  $a = 45$
- E.  $a = 60$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 5**

Solve the equation  $4y - 18 = 20$ .

- A.  $y = -13$
- B.  $y = \frac{1}{2}$
- C.  $y = 9\frac{1}{2}$
- D.  $y = 45$
- E.  $y = 16$
- F.  $y = 38$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 6**

Solve the equation  $12 = 4 - x$ .

- A.  $x = -16$
- B.  $x = -8$
- C.  $x = 4$
- D.  $x = 8$
- E.  $x = 16$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 7**

Solve the equation  $4(b - 2) - 10 = 2(b + 3)$ .

- A.  $b = -6$
- B.  $b = 4$
- C.  $b = 6$
- D.  $b = 10\frac{1}{2}$
- E.  $b = 12$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 8**

Solve the equation  $12m + 8 - 5m + 2 + m = 6(m + 1)$

A.  $m = 4\frac{1}{2}$

D.  $m = -\frac{2}{7}$

B.  $m = -2$

E.  $m = 1$

C.  $m = -\frac{1}{3}$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 9**

What is the solution set of the equation  $4x - (4 - x) = 5x$

A.  $\{-2\}$

C.  $\{\frac{1}{2}\}$

B.  $\{-\frac{1}{2}\}$

D.  $\{ \}$

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**Q1 10. Solving linear equations | Testing | Multiple choice | Page 10**

Solve the equation  $\frac{2}{3}x - 5 = \frac{1}{2}x - 3$ .

A.  $x = -2$

D.  $x = 6$

B.  $x = 2$

E.  $x = 12$

C.  $x = \frac{12}{5}$