

# ALGEBRAIC EQUATIONS

Algebraic equations use letters from the alphabet to denote numbers without actually putting a value to them. We learn how to express an unknown value using letters like  $x$ ,  $y$ , and  $z$  in the fundamentals of algebra. These letters are known as variables, as they get assigned different values depending on the equation. You will learn more about this as you keep reading.

[Read more](#)



**Q1: Solve for x:  $2x + 5 = 17$**

- A:  $x = 6$
  - B:  $x = 7$
  - C:  $x = 8$
  - D:  $x = 9$
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**Q2: Simplify:  $3(x - 4) + 2x$**

- A:  $5x - 12$
  - B:  $5x - 6$
  - C:  $5x - 8$
  - D:  $5x - 10$
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**Q3: If  $2(y + 3) = 14$ , what is the value of y?**

- A:  $y = 4$
  - B:  $y = 5$
  - C:  $y = 6$
  - D:  $y = 7$
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**Q4: Solve for z:  $4z - 8 = 20$**

- A:  $z = 3$
  - B:  $z = 4$
  - C:  $z = 5$
  - D:  $z = 6$
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**Q5: Simplify:  $2(3x - 7) + 5(2x + 1)$**

- A:  $16x - 9$
  - B:  $16x - 11$
  - C:  $16x - 13$
  - D:  $16x - 15$
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**Q6: If  $3(a - 2) = 15$ , what is the value of  $a$ ?**

- A:  $a = 4$
  - B:  $a = 5$
  - C:  $a = 6$
  - D:  $a = 7$
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**Q7: Solve for  $y$ :  $6y + 9 = 33$**

- A:  $y = 4$
  - B:  $y = 5$
  - C:  $y = 6$
  - D:  $y = 7$
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**Q8: If  $5(b + 2) = 25$ , what is the value of  $b$ ?**

- A:  $b = 3$
  - B:  $b = 4$
  - C:  $b = 5$
  - D:  $b = 6$
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**Q9: Simplify:  $4(x - 3) - 2(2x + 5)$**

- A:  $-4x - 14$
  - B:  $-6x - 6$
  - C:  $-4x - 10$
  - D:  $-6x - 8$
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**Q10: If  $2(c - 5) = -16$ , what is the value of  $c$ ?**

- A:  $c = -3$
  - B:  $c = -4$
  - C:  $c = -5$
  - D:  $c = -6$
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## Answers

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**Q1:**  $B - x = 7$

**Q2:**  $A - 5x - 12$

**Q3:**  $A - y = 4$

**Q4:**  $C - z = 5$

**Q5:**  $A - 16x - 9$

**Q6:**  $B - a = 5$

**Q7:**  $C - y = 6$

**Q8:**  $B - b = 4$

**Q9:**  $A - -4x - 14$

**Q10:**  $D - c = -6$