

TEST NAME: **NAMSIM1314A-SSE.2**  
TEST ID: **130094**  
GRADE: **09**  
SUBJECT: **Mathematics**  
TEST CATEGORY: **My Classroom**

Student: \_\_\_\_\_

Class: \_\_\_\_\_

Date: \_\_\_\_\_

1. Which expression is equivalent to  $y^2 - 25$ ?
  - A.  $(y - 5)(y - 5)$
  - B.  $(y - 5)(y + 5)$
  - C.  $(y - 25)(y - 1)$
  - D.  $(y - 25)(y + 5)$
  
2. Which expression is equivalent to  $100 - 4x^2$ ?
  - A.  $4(5 - x)(5 + x)$
  - B.  $4(5 - x)^2$
  - C.  $4(x - 5)^2$
  - D.  $4(x + 5)(x - 5)$
  
3. Which expression is equivalent to  $x^2 - y^2$ ?
  - A.  $(x - y)(x - y)$
  - B.  $(x + y)(x - y)$
  - C.  $(x + y)(x + y)$
  - D.  $2(x - y)$
  
4. Which expression is equivalent to  $x^2 - 16x + 60$ ?
  - A.  $(x - 12)(x - 5)$
  - B.  $(x + 20)(x - 3)$
  - C.  $(x - 15)(x - 4)$
  - D.  $(x - 10)(x - 6)$

5. Which expression is equivalent to  $y^3 + 4y^2 - 21y$ ?

- A.  $(y^2 - 3)(y + 7)$
- B.  $(y^2 + 3)(y - 7)$
- C.  $y(y - 3)(y + 7)$
- D.  $y(y + 3)(y - 7)$

6. Which expression is equivalent to  $2x^2 - 18x - 20$ ?

- A.  $2(x - 20)(x + 1)$
- B.  $2(x - 5)(x + 4)$
- C.  $2(x - 1)(x + 10)$
- D.  $2(x - 10)(x + 1)$

7. Which expression is a factor of  $2x^2 - 13x + 15$ ?

- A.  $2x + 15$
- B.  $2x + 5$
- C.  $x - 5$
- D.  $x - 3$

8. Which expression is equivalent to  $121 - m^2$ ?

- A.  $(-1)(m + 11)(m + 11)$
- B.  $(m + 11)(m - 11)$
- C.  $(11 - m)(11 - m)$
- D.  $(11 + m)(11 - m)$

9. Which expression is equivalent to  $x^2 - 49$ ?

- A.  $(x + 24.5)(x - 24.5)$
- B.  $(x - 24.5)(x - 24.5)$
- C.  $(x - 7)(x - 7)$
- D.  $(x - 7)(x + 7)$

10. Which expression is equivalent to  $4x^2 - 121$ ?
- A.  $(2x - 11)(2x - 11)$
  - B.  $(2x - 11)(2x + 11)$
  - C.  $(4x - 11)(x - 11)$
  - D.  $(4x - 11)(x + 11)$
11. Which expression is equivalent to  $7x^2 - 35x - 42$ ?
- A.  $7(x - 6)(x + 1)$
  - B.  $7(x - 1)(x + 6)$
  - C.  $7(x - 3)(x - 2)$
  - D.  $7(x + 3)(x - 2)$
12. Which expression is equivalent to  $14x^2 - 29x - 15$ ?
- A.  $(2x + 5)(7x - 3)$
  - B.  $(2x - 5)(7x + 3)$
  - C.  $(14x + 5)(x - 3)$
  - D.  $(14x - 5)(x + 3)$
13. Which expression is equivalent to  $2x^2 - 18x + 28$ ?
- A.  $(2x - 7)(x - 4)$
  - B.  $(2x + 7)(x - 4)$
  - C.  $2(x - 7)(x - 2)$
  - D.  $2(x + 7)(x - 2)$

14. Which expression is equivalent to  $a^2 + 2a - 8$ ?

- A.  $(a + 2)(a - 4)$
- B.  $(a + 4)(a - 2)$
- C.  $(a + 1)(a - 8)$
- D.  $(a - 1)(a + 8)$

15. Which expression is equivalent to  $6x^2 + 7x - 3$ ?

- A.  $(6x - 1)(x + 3)$
- B.  $(6x + 1)(x - 3)$
- C.  $(3x - 1)(2x + 3)$
- D.  $(3x - 3)(2x + 1)$

16. Which expression is equivalent to  $x^2 - 64$ ?

- A.  $(x - 8)(x - 8)$
- B.  $(x - 8)(x + 8)$
- C.  $(x - 4)(x - 16)$
- D.  $(x - 4)(x + 16)$

17. Which expression is equivalent to  $x^2 - 12x + 36$ ?

- A.  $(x + 9)(x - 4)$
- B.  $(x - 9)(x - 4)$
- C.  $(x + 6)(x - 6)$
- D.  $(x - 6)(x - 6)$

18. Which expression is equivalent to  $6x^2 - 29x + 28$ ?

- A.  $(6x - 7)(x + 4)$
- B.  $(6x - 7)(x - 4)$
- C.  $(2x - 7)(3x + 4)$
- D.  $(2x - 7)(3x - 4)$

19. Which expression is equivalent to  $4x^2 + x - 3$ ?

- A.  $(4x - 3)(x + 1)$
- B.  $(4x + 3)(x - 1)$
- C.  $(2x - 3)(2x + 1)$
- D.  $(2x + 3)(2x - 1)$

20. Which expression is equivalent to  $x^2 - 4y^2$ ?

- A.  $(x + 2y)(x - 2y)$
- B.  $(x - 2y)(x - 2y)$
- C.  $(x + y)(x - 4y)$
- D.  $(x + 4y)(x - y)$

21. Which expression is a factor of  $a^2 - a - 30$ ?

- A.  $a - 5$
- B.  $a - 2$
- C.  $a + 5$
- D.  $a + 6$

22. Which expression is equivalent to  $3x^2 + 4x - 15$ ?

- A.  $(3x - 5)(x + 3)$
- B.  $(3x + 5)(x - 3)$
- C.  $(3x - 1)(x + 15)$
- D.  $(3x + 1)(x - 15)$

23. Which expression is equivalent to  $8x^2 + 3x - 5$ ?
- A.  $(4x - 5)(2x + 1)$
  - B.  $(4x + 5)(2x - 1)$
  - C.  $(8x - 5)(x + 1)$
  - D.  $(8x + 5)(x - 1)$
24. Which expression is equivalent to  $8x^2 + 26x - 7$ ?
- A.  $(8x - 1)(x + 7)$
  - B.  $(4x + 7)(2x - 1)$
  - C.  $(8x + 7)(x - 1)$
  - D.  $(4x - 1)(2x + 7)$
25. Which expression is equivalent to  $x^2 + 5x - 24$ ?
- A.  $(x + 8)(x + 3)$
  - B.  $(x - 8)(x + 3)$
  - C.  $(x - 8)(x - 3)$
  - D.  $(x + 8)(x - 3)$
26. Which expression is equivalent to  $-10x^2 - 35x + 75$ ?
- A.  $-5(2x - 5)(x + 3)$
  - B.  $-5(2x - 3)(x + 5)$
  - C.  $5(2x - 5)(x + 3)$
  - D.  $5(2x - 3)(x + 5)$
27. Which expression is equivalent to  $r^2 + r - 2$ ?
- A.  $(r + 2)(r + 1)$
  - B.  $(r - 2)(r + 1)$
  - C.  $(r + 2)(r - 1)$
  - D.  $(r - 2)(r - 1)$

28. Which expression is equivalent to  $4t^2 - 16$ ?

- A.  $4(t - 4)(t - 4)$
- B.  $4(t + 4)(t - 4)$
- C.  $4(t + 2)(t - 2)$
- D.  $4(t - 2)(t - 2)$

29. Which expression is equivalent to  $6x^2 + x - 1$ ?

- A.  $(2x - 1)(3x + 1)$
- B.  $(2x + 1)(3x - 1)$
- C.  $(6x + 1)(x - 1)$
- D.  $(6x - 1)(x + 1)$

30. Which expression is equivalent to  $12r^2 + r - 35$ ?

- A.  $(2r - 5)(6r + 7)$
- B.  $(2r + 5)(6r - 7)$
- C.  $(3r - 5)(4r + 7)$
- D.  $(3r + 5)(4r - 7)$

31. Which expression is equivalent to  $12x^2 + 16x - 35$ ?

- A.  $(6x + 7)(2x - 5)$
- B.  $(3x + 7)(4x - 5)$
- C.  $(2x + 5)(6x - 7)$
- D.  $(4x - 5)(3x - 7)$



32. Which expression is equivalent to  $2x^2 - 72$ ?
- A.  $(2x - 9)(x - 8)$
  - B.  $(2x - 9)(x + 8)$
  - C.  $2(x - 6)(x - 6)$
  - D.  $2(x - 6)(x + 6)$
33. Which expression is equivalent to  $7r^2 - 43rs + 6s^2$ ?
- A.  $(r + 6s)(7r - s)$
  - B.  $(r - s)(7r - 6s)$
  - C.  $(r - 2s)(7r - 3s)$
  - D.  $(r - 6s)(7r - s)$
34. Which expression is equivalent to  $15x^2 + 32x - 28$ ?
- A.  $(3x + 4)(5x - 7)$
  - B.  $(3x - 4)(5x + 7)$
  - C.  $(3x + 2)(5x - 14)$
  - D.  $(3x - 2)(5x + 14)$