Part 1

Select the best answer from the choices provided. (Each question is worth one point)

1. Which method for determining the product of two binomials uses the process of first times first, outer times outer, inner times inner, and last times last?

   - ○ column form
   - ○ multiplicative inverse
   - ◉ FOIL
   - ○ vertical method

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2. Which is an example of using the column form to find the product of two binomials?

   - ○ FOIL
   - ◉ $2(4t + 2)$
   - ○ $\begin{array}{r} 5m + 3 \\ \underline{\times\ 4m - 3} \end{array}$
   - ○ $(5m + 3)(4m - 3)$

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3. Which of the following is an acronym used to remember the steps needed to multiply two binomials?

   - ○ BOOK
   - ◉ FOIL
   - ○ POLY
   - ○ column method

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4. c^2 is equal to which of the following?

   - ○ c
   - ○ $2c$
   - ◉ $(c)(c)$
   - ○ $c + c$

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5. $(b + 1)^2$ is equal to which of the following?

   - ○ $(b + 1)(b - 1)$
   - ◉ $(b + 1)(b + 1)$
   - ○ $b^2 + 1$
   - ○ $b^2 - 1$

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6. Which of the following expressions is the square of a sum?

   - ○ $(h + 3)^2$
   - ○ $(h - 3)^2$
   - ○ $(h + 3)(h - 3)$
   - ○ $(h - 3)(h + 3)$

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7. The square of the first term of the binomial plus twice the product of the two terms plus the square of the last term is known as which formula?

   - ○ column method
   - ○ binomial formula
   - ◉ square of a sum
   - ○ sum and difference of binomials

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8. Using the square of a sum rule, which of the following expressions is the product of $(2n + 1)^2$?

   - ○ $2n^2 + n + 1$
   - ○ $2n^2 + 4n + 2$
   - ○ $4n^2 + 4n + 2$
   - ◉ $4n^2 + 4n + 1$

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9. The product of the sum and difference of two terms is the difference of _____.

   - ○ middle terms
   - ○ last terms
   - ○ first terms
   - ◉ squares

Part 2

Select the best answer from the choices provided. (Each question is worth one point)

10. Simplify:
$4n(2n + 2)$

- ○ $8n^2 + 2n$
- ◉ $8n^2 + 8n$
- ○ $4n^2 + 8n$
- ○ $8n + 8n$

11. Simplify:
$8c^2(b^2 - 2c)$

- ○ $b^2c^2 - 16c^3$
- ○ $8b^2c - 16c^3$
- ◉ $8b^2c^2 - 16c^3$
- ○ $8b^2c^2 - 16c^2$

12. Find the product:
$(6t + 4)(-5t - 10)$

- ○ $30t^2 - 80t - 40$
- ◉ $-30t^2 - 80t - 40$
- ○ $30t^2 + 80t - 40$
- ○ $-30t^2 - 80t + 40$

13. Find the product:
$(m + 1)(-7m - 5)$

- ◉ $-7m^2 - 12m - 5$
- ○ $7m^2 - 12m - 5$
- ○ $-7m^2 - 12m + 5$
- ○ $-7m^2 + 12m - 5$

14. Find the product:
$(4b - 9)(7b - 6)$

- ○ $28b^2 + 87b + 54$
- ○ $28b - 87b + 54$
- ◉ $28b^2 - 87b + 54$
- ○ $28b^2 - 87b - 54$

15. Find the product:
$4v - 6$
$\underline{\text{x } 4v + 3}$

- ○ $16v^2 + 12v - 18$
- ○ $16v^2 - 12v - 18$
- ○ $16v^2 - 24v - 18$
- ○ $16v^2 - 12v + 18$

16. Find the product:
$5n + 10$
$\underline{\text{x } 2n + 4}$

- ○ $10n^2 + 20n + 40$
- ○ $10n^2 + 10n + 40$
- ○ $10n^2 + 40n + 4$
- ○ $10n^2 + 40n + 40$

17. Find the product:
$(6k + 4n)^2$

- ○ $36k^2 + 12kn + 16n^2$
- ○ $36k^2 + 10kn + 16n^2$
- ◉ $36k^2 + 48kn + 16n^2$
- ○ $36k^2 + 24kn + 16n^2$

18. Find the product:
$(3ab - 3c)^2$

- ○ $9a^2b^2 - 18abc - 9c^2$
- ○ $9a^2b^2 - 9abc + 9c^2$
- ○ $9a^2b - 18c + 9abc^2$
- ◉ $9a^2b^2 - 18abc + 9c^2$

Part 3

Select the best answer from the choices provided. (Each question is worth one point)

19. $v^2 + 2v + 1$ is the product of which two binomials?

- ◉ $(v + 1)^2$
- ○ $(v + 1)(v - 1)$
- ○ $(v - 1)(1 - v)$
- ○ $(v - 1)(v - 1)$

20. $t^2 - 4t + 4$ is the product of which algebraic expression?

- ◉ $(t - 2)^2$
- ○ $(t - 4)^2$
- ○ $(t - 2)(t + 2)$
- ○ $(t - 4)(t + 4)$

21. Evaluate $(c + 1)^0$ when $c = 1$.

- ○ 2
- ○ 4

- ○ 0
- ◉ 1

22. Simplify:
$(-9b^3 - 5)^2$

- ○ $81b^6 - 90b^3 + 25$
- ○ $81b^6 - 90b^3 - 25$
- ○ $81b^6 - 90b^3 + 25$
- ◉ $81b^6 + 90b^3 + 25$

art 4

ype the answer to the question in the textbox below each item. (Each question is worth two points)

23. Simplify 203.

cant be simplified but
7x29=203

24. The product of the sum and difference of the same two terms is equal to what?

difference of squares

25. What is the exponent of the monomial n5?

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