

## Trig Chapter 2 Practice Test 2 2019-20

Name: \_\_\_\_\_

Time> Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total Time = \_\_\_\_\_

**Factor each into the product of two binomials. If the expression cannot be factored, write "NOT FACTORABLE."**

\_\_\_\_\_ 1.  $x^2 - 36x + 35$

\_\_\_\_\_ 2.  $x^2 - 4$

\_\_\_\_\_ 3.  $5x^2 + 27x + 10$

\_\_\_\_\_ 4.  $8x^2 + 22x + 15$

\_\_\_\_\_ 5.  $2x^2 + 2x - 24$

\_\_\_\_\_ 6.  $9x^2 + 30xy + 25y^2$

**Factor completely.**

\_\_\_\_\_ 7.  $8x^3 - 125$

\_\_\_\_\_ 8.  $64n^3 + y^3$

\_\_\_\_\_ 9.  $n^3 - 27y^3$

\_\_\_\_\_ 10.  $125n^3 + 8y^3$

\_\_\_\_\_ 11.  $3n^4y + 9n^6y^2$

\_\_\_\_\_ 12.  $45n^3y - 18n^4y$

\_\_\_\_\_ 13.  $8nxy^2 - 8nxy^3$

\_\_\_\_\_ 14.  $100n^3b + 200n^3b^9$

\_\_\_\_\_ 15.  $x^3 + 5x^2 + 3x + 15$

\_\_\_\_\_ 16.  $2k^3 + 2k - 7k^2 - 7$

\_\_\_\_\_ 17.  $5b^3 - 10b^2 - b + 2$

\_\_\_\_\_ 18.  $10k^3 - 15k + 2k^2 - 3$

**Simplify in 19-22.**

\_\_\_\_\_ 19.  $\frac{n^2 - 5n - 14}{n^2 + 2n}$

\_\_\_\_\_ 20.  $\frac{n^2 - 36}{n^2 - 11n + 30}$

\_\_\_\_\_ 21.  $\frac{n^2 + 10n + 21}{n^2 + 7n + 12}$

\_\_\_\_\_ 22.  $\frac{6n^2 + 5n + 1}{2n^2 - n - 1}$

23.  $a-3 \overline{)a^2+2a-15}$

24.  $a-5 \overline{)a^2-25}$

25.  $a^2+a+2 \overline{)a^3+2a^2+3a+2}$

26.  $a+2 \overline{)a^3+8}$

27.  $a+5 \overline{)a^2-6a-3}$

28.  $a-2 \overline{)a^2-8}$

**How many possibilities exist?**

\_\_\_\_\_ 29.  $2n^2 + \square n + 15$

\_\_\_\_\_ 30.  $15n^2 + \square n + 20$

\_\_\_\_\_ 31.  $10n^2 + \square n + 28$

\_\_\_\_\_ 32.  $8n^2 + \square n + 3$

\_\_\_\_\_ 33.  $4n^2 + \square n + 1$

\_\_\_\_\_ 34.  $11n^2 + \square n + 49$

\_\_\_\_\_ 35.  $12n^2 + \square n + 40$

\_\_\_\_\_ 36.  $15n^2 + \square n + 40$

\_\_\_\_\_ 37.  $20n^2 + \square n + 20$