

# Trig Chapter 1 Practice Test 2

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

Time Start: \_\_\_\_\_ Finish: \_\_\_\_\_

Total Time = \_\_\_\_\_

**Solve each equation.**

1.  $5n - (2n - 1) = 2(2n - 3)$

2.  $-3(-2n + 2) = -4n + 1$

3.  $8n = 3n - 2n + 1 - 5$

4.  $4(x - 2) - 3(x - 2) = -10$

**Simplify each expression or radical**

\_\_\_\_\_ 5.  $(2a^5)^3$

\_\_\_\_\_ 14.  $(-5x^5)(-4x^5)$

\_\_\_\_\_ 6.  $n^5 \cdot n^5$

\_\_\_\_\_ 15.  $(-4a^2b^3)^2$

\_\_\_\_\_ 7.  $(n^3)^4$

\_\_\_\_\_ 16.  $(abc)^2(-3abc)$

\_\_\_\_\_ 8.  $n^2y^2 + n^3y + 9n^2y^2 + n^3y$

\_\_\_\_\_ 17.  $a^{20} \bullet a^{40}$

\_\_\_\_\_ 9.  $(-5y^4)(3y^4)$

\_\_\_\_\_ 18.  $(7ab^2)(-7ab)$

\_\_\_\_\_ 10.  $(2x + 1)(3x - 1)$

\_\_\_\_\_ 19.  $(-8a^4b^{10})(-4a^4b^3)$

\_\_\_\_\_ 11.  $(5x + 1)^2$

\_\_\_\_\_ 20.  $(-2ab^6c^2)^3$

\_\_\_\_\_ 12.  $(4x^2 + x)(x^2 - 2x - 1)$

\_\_\_\_\_ 21.  $(ab^3)(4a^2b^2)$

\_\_\_\_\_ 13.  $(2n^2y^3)^2 + 3n(n^4)y^6$

\_\_\_\_\_ 22.  $x \bullet 3x \bullet 2x^2 \bullet x$

\_\_\_\_\_ 23.  $\sqrt{-10}$

\_\_\_\_\_ 34.  $\frac{3 \pm \sqrt{45}}{3}$

\_\_\_\_\_ 24.  $\sqrt{a^5 b^6}$

\_\_\_\_\_ 35.  $\frac{n^6}{y^{10}} \cdot \frac{y^{10}}{n^5}$

\_\_\_\_\_ 25.  $\sqrt{-50a^2}$

\_\_\_\_\_ 36.  $n^{-30} \cdot y^{50} \cdot n^{-20} \cdot y^{-30}$

\_\_\_\_\_ 26.  $\sqrt{140}$

\_\_\_\_\_ 37.  $\frac{c^3 w^{-5} h^{-1}}{c^{-1} w^2 h}$

\_\_\_\_\_ 27.  $\sqrt{-800}$

\_\_\_\_\_ 38.  $\left(\frac{a^{-1} b^2}{ab^{-3} c^{-1}}\right)^{-2}$

\_\_\_\_\_ 28.  $\sqrt[6]{a^9 b^6}$

\_\_\_\_\_ 39.  $\left(\frac{1}{10}\right)^{-2}$

\_\_\_\_\_ 29.  $\sqrt[4]{16x^4 y^8}$

\_\_\_\_\_ 40.  $(-2a^{-5})^2$

\_\_\_\_\_ 30.  $\sqrt[3]{x^6 y^{12}}$

\_\_\_\_\_ 41.  $(2ma^2 d^{-1} i)^{-3}$

\_\_\_\_\_ 31.  $\sqrt[4]{160}$

\_\_\_\_\_ 42.  $\frac{y^5 e^{-5} s^3}{y^7 e^{-3} s^{-4}}$

\_\_\_\_\_ 32.  $\frac{6 \pm \sqrt{-8}}{8}$

\_\_\_\_\_ 43.  $\frac{6ny}{36n^4 y^3}$

\_\_\_\_\_ 33.  $\frac{3 \pm \sqrt{27}}{3}$

\_\_\_\_\_ 44.  $\frac{10 \pm \sqrt{200}}{10}$

\_\_\_\_\_ 45. Which of the following is equal to  $(2^5 \times 2^3)^9$ ?

- A.  $4^{72}$       B.  $4^{17}$       C.  $2^{17}$       D.  $2^{72}$       E. None of the above

\_\_\_\_\_ 46. What is the digit in the 1000<sup>th</sup> spot after the decimal point in  $\overline{.2345678}$ ?