

Trig Review Quiz 25

Name _____

- _____1. Perform the following division $n-2 \sqrt{n^2+3n-1}$
- A. $n+5+\frac{-11}{n-2}$ B. $n+5+\frac{9}{n-2}$ C. $n+1+\frac{1}{n-2}$ D. $n+1+\frac{-3}{n-2}$
- _____2. Simplify $\left(\frac{n^2y^{-2}}{a^{-4}}\right)^2$
- A. $\frac{n^4y^4}{a^{16}}$ B. $\frac{n^4y^4}{a^8}$ C. $\frac{n^4a^{16}}{y^4}$ D. $\frac{n^4a^8}{y^4}$
- _____3. What is the interval notation for $x > 3$?
- A. $(-\infty, 3)$ B. $(3, \infty)$ C. $(-\infty, 3]$ D. $[3, \infty)$
- _____4. What is the domain of $f(x) = \sqrt{x-3}$?
- A. $x \neq 3$ B. $x > 3$ C. $x \geq 3$ D. None of the above
- _____5. What is the horizontal asymptote of $y = \frac{4x^3+5}{4x^3+1}$?
- A. $y = 0$ B. $y = \frac{1}{2}$ C. $y = 1$ D. No horizontal asymptote
- _____6. When I was young with a great set of hair, I had 10 girlfriends. If I wanted to pick 3 of them to come with me to the disco club, how many different options did I have to choose from?
- A. 120 B. 720 C. 1040 D. You had hair?
- _____7. $|2x+3| < 9$
- A. $x > 3$ or $x < -6$ B. $-6 < x < 3$
C. $x > -6$ or $x < 3$ D. None of the above
- _____8. What is the derivative of $f(x) = 2x^6 + 4x^2 - 3x + 3$?
- A. $12x^7 + 8x^3 - 3x^2 + 3x$ B. $12x^5 + 4x - 3$
C. $12x^5 + 8x - 3$ D. None of the above
- _____9. What is the slope of the line tangent to the graph of $f(x) = x^3 - x + 3$ at the point $(2, 9)$?
- A. 10 B. 11 C. 12 D. 14
- _____10. If the discriminant value in the quadratic equation comes up to be a negative number, how many solutions exist?
- A. 0 B. 1 C. 2 D. 3