

Trig Review Quiz 0-5 C

- _____ 1. Solve for n: $4(2n + 5) + 2(3n + 5) = 10n + 22$
A. $n = -4$ B. $n = \frac{1}{2}$ C. $n = -2$ D. $n = 2$
- _____ 2. Factor $8n^3 + 125$
A. $(2n + 5)(4n^2 + 10n + 25)$ B. $(2n - 5)(4n^2 + 10n + 25)$
C. $(2n + 5)(4n^2 - 10n + 25)$ D. $(2n - 5)(8n^2 + 10n + 25)$
- _____ 3. If $f(x) = 3x - 10$ and $g(x) = 2x + 1$, what is $f(g(x))$?
A. $6x - 19$ B. $6x - 13$ C. $6x + 13$ D. $6x - 7$
- _____ 4. $\sum_{n=-2}^1 2n - 1$?
A. -10 B. -9 C. -8 D. -6
- _____ 5. What is the distance from $(n, 3)$ to $(n + 2, 7)$?
A. $2\sqrt{5}$ B. $5\sqrt{2}$ C. $5\sqrt{3}$ D. $3\sqrt{2}$
- _____ 6. What is the value of y in System $\begin{cases} 2x + 3y = 8 \\ 4x + 2y = 12 \end{cases}$?
A. $y = 1$ B. $y = 2$ C. $y = 7$ D. None of the above
- _____ 7. What is the domain of $f(x) = \sqrt{2x - 12}$?
A. $\mathbb{R} : x \neq 6$ B. $\mathbb{R} : x > 6$ C. $\mathbb{R} : x < 6$ D. $\mathbb{R} : x \geq 6$
- _____ 8. What is the horizontal asymptote of $y = \frac{2x^3 + 5}{3x^2 + 1}$?
A. $y = 0$ B. $y = \frac{2}{3}$ C. $y = 1$ D. No horizontal asymptote
- _____ 9. What is the horizontal asymptote of $y = \frac{3x^5 + 2}{4x^2 + 2x + 1}$?
A. None exists B. $y = 0$ C. $y = \frac{3}{4}$ D. $y = 3$
- _____ 10. The interval notation for $\{\mathbb{R} : -2 < y \leq 1\}$ is
A. $(-2, 1)$ B. $[-2, 1)$ C. $(-2, 1]$ D. $[-2, 1]$