

Trig Review Quiz 13

(NO CALCULATOR)

Name: _____

- _____ 1. Solve for n: $4(n - 2) - (2n - 6) = 10$
A. $n = -6$ B. $n = 12$ C. $n = 6$ D. $n = -12$
- _____ 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. Simplify $\sqrt{160}$
A. 40 B. $10\sqrt{4}$ C. $2\sqrt{40}$ D. $4\sqrt{10}$
- _____ 5. $\left(\frac{1}{2}\right)^{-3}$
A. $\frac{1}{6}$ B. $\frac{1}{8}$ C. 6 D. 8
- _____ 6. Simplify $\sqrt[3]{16x^4y^8}$
A. $4xy^2\sqrt[3]{2xy^2}$ B. $2xy\sqrt[3]{2xy^2}$ C. $2xy^2\sqrt[3]{2xy^2}$ 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. $x + 3 \sqrt{2x^2 + 11x + 15}$
A. $2x + 3$ B. $2x + 5$ C. $2x + \frac{3}{x + 3}$ D. None of the above
- _____ 9. $\left(\frac{9a^{-1}}{b^8}\right)^{-2}$
A. $\frac{a^2b^{16}}{81}$ B. $\frac{b^{16}}{81a^2}$ C. $\frac{b^{64}}{81a^2}$ D. None of the above
- _____ 10. The interval notation for $\{\mathbb{R} : -2 < y \leq 1\}$ is
A. $(-2, 1)$ B. $[-2, 1)$ C. $(-2, 1]$ D. $[-2, 1]$