

# Trig Review Quiz 7

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

- \_\_\_\_\_ 1.  $(5n^3)^2$   
A.  $10n^6$       B.  $10n^9$       C.  $25n^6$       D.  $25n^9$
- \_\_\_\_\_ 2.  $(5a^2n^3)(-2a^2n^3)$   
A.  $3a^2n^3$       B.  $-10a^4n^9$       C.  $-10a^4n^6$       D. None of the above
- \_\_\_\_\_ 3.  $\left(\frac{2}{3}\right)^{-3}$  NO CALCULATOR ALLOWED!  
A.  $\frac{6}{27}$       B.  $\frac{8}{27}$       C.  $\frac{27}{8}$       D.  $-\frac{8}{27}$
- \_\_\_\_\_ 4. 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.  $\mathbb{R} : x \geq 6$
- \_\_\_\_\_ 5.  $x+3\sqrt{2x^2+11x+15}$   
A.  $2x+3$       B.  $2x+5$       C.  $2x + \frac{3}{x+3}$       D. None of the above
- \_\_\_\_\_ 6.  $1000y^3 - x^3$   
A.  $(10y+x)(100y^2 - 10xy + x^2)$       B.  $(10y-x)(100y^2 - 10xy + x^2)$   
C.  $(10y+x)(100y^2 + 10xy + x^2)$       D.  $(10y-x)(100y^2 + 10xy + x^2)$
- \_\_\_\_\_ 7.  $\left(\frac{9a^{-1}}{b^8}\right)^{-2}$   
A.  $\frac{a^2b^{16}}{81}$       B.  $\frac{b^{16}}{81a^2}$       C.  $\frac{b^{64}}{81a^2}$       D. None of the above
- \_\_\_\_\_ 8. If  $f(x) = x - 1$  and  $g(x) = 4x$ , what is  $f(g(5))$ ?  
A. 19      B. 16      C.  $16x - 1$       D.  $12x + 4$
- \_\_\_\_\_ 9. The interval notation for  $\{\mathbb{R} : -2 < y \leq 1\}$  is  
A.  $(-2, 1)$       B.  $[-2, 1)$       C.  $(-2, 1]$       D.  $[-2, 1]$
- \_\_\_\_\_ 10.  $(x+2)(x-2)(x+3)$   
A.  $x^3 - 3x^2 - 4x - 12$       B.  $x^3 + 3x^2 - 4x - 12$   
C.  $x^3 + 3x^2 + 4x - 12$       D.  $x^3 + 3x^2 - 4x + 12$