

# Trig Review Quiz 0-8 E

- \_\_\_\_\_1. What is the domain of  $f(x) = \sqrt{5x-10}$   
A.  $\mathbb{R}: x \neq 2$       B.  $\mathbb{R}: x > 2$       C.  $\mathbb{R}: x \geq 2$       D.  $\mathbb{R}: x \leq 2$
- \_\_\_\_\_2. What is the slope of the line tangent to the graph of  $f(x) = 2x^4 - x^2 + 6$  at the point  $(1, 7)$ ?  
A. 4      B. 6      C. 112      D. None of the above
- \_\_\_\_\_3. **NO CALCULATOR!** If  $A = \begin{bmatrix} 2 & 3 \\ 4 & -1 \end{bmatrix}$  and  $B = \begin{bmatrix} -2 & 3 \\ 2 & 0 \end{bmatrix}$ , what is  $AB$ ?  
A.  $\begin{bmatrix} 2 & 6 \\ -10 & 12 \end{bmatrix}$       B.  $\begin{bmatrix} -10 & 6 \\ -6 & 12 \end{bmatrix}$       C.  $\begin{bmatrix} 12 & -6 \\ 10 & 2 \end{bmatrix}$       D. None of the above
- \_\_\_\_\_4. 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
- \_\_\_\_\_5. Which equation would have a vertical asymptote at  $x = -2$ ?  
A.  $y = \frac{x^3}{x+2}$       B.  $y = \frac{x-2}{2}$       C.  $y = \sqrt{x-2}$       D.  $y = \sqrt{x+2}$
- \_\_\_\_\_6. What is the inverse of  $y = (3+x)^2 - 5$ ?  
A.  $y = \sqrt{x+2}$       B.  $y = \sqrt{\frac{x+5}{3}}$       C.  $y = \sqrt{x-5} - 3$       D.  $y = \sqrt{x+5} - 3$
- \_\_\_\_\_7. What is the slant asymptote of  $y = \frac{2x^2 + 5x + 1}{x+4}$ ?  
A.  $y = 2x - 3$       B.  $y = x + 7$       C.  $y = 5x - 2$       D. None of the above
- \_\_\_\_\_8. What is  $40^\circ$  in radians.  
A.  $\frac{\pi}{7}$       B.  $\frac{2\pi}{9}$       C.  $\frac{\pi}{11}$       D.  $\frac{\pi}{12}$
- \_\_\_\_\_9. Which is the equation that is parallel to  $y = 3x - 5$  and goes through  $(3, 4)$ ?  
A.  $y = 3x - 1$       B.  $y = 3x - 2$       C.  $y = 3x + 1$       D.  $y = 3x - 5$
- \_\_\_\_\_10. What is the distance from  $(-3, -2)$  to  $(1, -6)$ ?  
A.  $4\sqrt{2}$       B.  $3\sqrt{2}$       C.  $2\sqrt{3}$       D.  $2\sqrt{2}$