Trig Review Quiz 27

Name: _____

_____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?

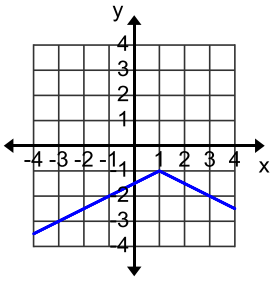
A. $y = \frac{x^3}{x+2}$ B. $y = \frac{x-2}{2}$ C. $y = \sqrt{x-2}$ D. $y = \sqrt{x+2}$

_____6. Which equation below is incorrect?

A. $\tan\theta = \frac{\text{opposite}}{\text{adjacent}}$ B. $\sin\theta = \frac{\text{hypotenuse}}{\text{opposite}}$ C. $\cos\theta = \frac{\text{adjacent}}{\text{hypotenuse}}$

_____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 equation is graphed above.

A. $y = -\frac{1}{2}|x-1|-1$ B. $y = \frac{1}{2}|x+1|-1$ C. $y = -\frac{1}{2}|x+1|-1$ D. $y = \frac{1}{2}|x-1|+1$

_____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. $2\sqrt{2}$