Trig Review Quiz 0-5 B

Name: _____

_____1. If A is a 4 x 5 matrix, B a 4 x 3 matrix, and C a 3 x 5 matrix, what matrices could be multiplied?

A. A and B B. A and C C. B and C D. All of them could be

_____2. Simplify $\frac{n^2+6n+8}{n^2+7n+12}$

A. $\frac{n+2}{n+3}$ B. $\frac{n+3}{n+4}$ C. $\frac{n+6}{n+4}$ D. $\frac{n+1}{n+4}$

_____3. Which equation below is not in standard form?

A. 3x – y = 5 B. 4x + y = -3 C. -2x + y = 9 D. x – y = -1

_____4. What is the domain of f(x) = $\frac{x^3}{x-3}$?

A. $x \neq 3$ B. $x > 3$ C. $x \geq 3$ D. None of the above

_____5. Simplify $\frac{4 \pm \sqrt{-40}}{2}$

A. $2 \pm i\sqrt{10}$ B. $2 \pm 2i\sqrt{10}$ C. $2 \pm i\sqrt{20}$ D. $2 \pm 2i$

_____6. Simplify $\frac{n^2+9n-10}{n^2-3n-4}$

A. $\frac{n+10}{n+4}$ B. $\frac{n+10}{n-4}$ C. $\frac{n+6n-6}{1}$ D. Doesn't simplify

_____7. Simplify $\left(a^{-3}b^{-2}\right)^{-2}$

A. $\frac{-1}{a^6b^4}$ B. $\frac{a^6}{b^4}$ C. $\frac{1}{a^6b^4}$ D. a^6b^4

_____8. What is the vertical asymptote of $y = \frac{2x^3+5}{x+4}$?

A. x = 4 B. x= -4 C. x = 2 D. No vertical asymptote

_____9. What is the domain of f(x) = $x^3 - 8$?

A. $x \neq 2$ B. $\mathbb{R}$ C. $x \geq 2$ D. $x > 2$

_____10. Which is the equation that is perpendicular to y = -2x + 4 and goes through (4, 1)?

A. $y = \frac{1}{2}x + 1$ B. $y = 2x - 7$ C. $y = -\frac{1}{2}x + 1$ D. $y = \frac{1}{2}x - 1$