## Trig Review Quiz 3

Name $\qquad$
$\qquad$ 1. Simplify $(x+1)\left(x^{2}+2 x+3\right)$
A. $x^{3}+x^{2}+2 x+3$
B. $x^{3}+3 x^{2}+5 x+3$
C. $x^{3}+x^{2}+5 x+3$
D. $x^{3}+3 x^{2}+2 x+3$
2. What is the horizontal asymptote of $y=\frac{4 x^{3}+5}{4 x^{2}+1}$ ?
A. $\mathrm{y}=0$
B. $y=\frac{1}{2}$
C. $y=1$
D. No horizontal asymptote
3. What is the value of y in $\left\{\begin{array}{l}y=-2 x+5 \\ x+2 y=4\end{array}\right.$
4. Factor $\quad 3 n^{3}+12 n^{2}+2 n+8$
A. $(n+2)\left(3 n^{2}+4\right)$
B. $(3 n+4)\left(n^{2}+2\right)$
C. $(3 n+2)\left(n^{2}+4\right)$
D. $(n+4)\left(3 n^{2}+2\right)$
5. Which equation below is not in standard form?
A. $3 x-y=5$
B. $4 x+y=-3$
C. $-2 x+y=9$
D. $x-y=-1$
6. What is the domain of $\mathrm{f}(\mathrm{x})=\sqrt{-2 x+4}$ ?
A. $x \neq 2$
B. $x \leq 2$
C. $x \geq 2$
D. All Real Numbers
7. In interval notation, what is $x>3$ ?
A. $(3, \infty)$
B. $[3, \infty)$
C. $(-\infty, 3)$
D. $(-\infty, 3]$
8. If A is a $4 \times 5$ matrix, B a $4 \times 3$ matrix, and C a $3 \times 5$ matrix, what matrices could be multiplied?
A. A and B
B. A and C
C. B and C
D. All of them could be
$\qquad$ 9. $|2 x+3|>9$
A. $\mathrm{x}>3$ or $\mathrm{x}<-6$
B. $-6<x<3$
C. $x>-6$ or $x<3$
D. None of the above
10. What age do you believe is the perfect age in life?

In other words, if you could pick one age and stay that age forever, what age would it be?

