

- $\cos \frac{7\pi}{6}$
- Find the inverse function:  $y = 7x - 3$
- \$7523.12 invested at an annual rate of 4.3% over 14 years compounded 3 times a year will be worth what?
- \$14351.93 invested at an annual rate of 3.2% over 22 years compounded continuously will be worth what?
- $f(x) = \frac{x^2 - 7x + 10}{x^2 + x - 6}$  Find the equation of the vertical asymptote
- Solve:  $14^x = 5100$  Accurate to 4-decimal places
- Simplify:  $\cot x \sin x$
- Simplify:  $\cos\left(\frac{\pi}{2} - x\right)$
- How many degrees in a radian Accurate to 1 decimal place
- $\tan 60^\circ =$  Write the exact answer
- While solving a system of linear equations, by augmented matrices, you encounter  $\begin{bmatrix} 3 & 0 & 3 & 0 \\ 0 & 0 & 1 & 4 \\ 0 & 2 & -2 & -2 \end{bmatrix}$ .  
According to our class, what should the next Matrix be?
- Show the setup only to find  $y$  using Cramer's Rule:  $\begin{cases} x - y + 2z = 6 \\ 2x + y + z = 3 \\ x + y + z = 2 \end{cases}$
- $\begin{vmatrix} 1 & -2 & 1 \\ 2 & -2 & -3 \\ 4 & -1 & 3 \end{vmatrix} =$
- Solve by Augmented Matrices:  $\begin{cases} 2x + 3y = 7 \\ x - 2y = 9 \end{cases}$
- Find the absolute value of  $\langle 4, 7 \rangle$

16. Find the Multiplicative Inverse of  $\begin{bmatrix} 3 & -2 \\ 4 & 1 \end{bmatrix}$

17. Find the Multiplicative Inverse of  $\begin{bmatrix} -1 & 1 & 0 \\ -1 & 0 & 1 \\ 6 & -2 & -3 \end{bmatrix}$

18. Use Cramer's Rule to solve:  $\begin{cases} 3x + y = 1 \\ 5x - 2y = 20 \end{cases}$

19. In  $\triangle ABC$ ,  $A(2, 4)$ ,  $B(-3, 2)$ ,  $C(1, 6)$ . Find the area.

20. Find the multiplicative inverse:  $\begin{bmatrix} 5 & 1 \\ -2 & -2 \end{bmatrix}$

21. Find the Determinant, showing Expansion by Minors, then simplifying  $\begin{bmatrix} 1 & 2 & 1 \\ 2 & -1 & 1 \\ x & 0 & 2 \end{bmatrix}$

23.  $(3 \text{ cis } 15^\circ)^4 =$

24. Find the angle between  $\langle -5, -1 \rangle$  and  $\langle -1, 1 \rangle$

25.  $\begin{bmatrix} 1 & 3 & 4 \\ -2 & 3 & 1 \end{bmatrix} * \begin{bmatrix} 0 & 4 & 1 \\ 1 & -5 & 8 \end{bmatrix} =$

26. Simplify:  $i^{15} =$

27. Simplify:  $\frac{2+3i}{5-2i} =$