

EOC REVIEW – A variety of Calculator Functions

<p>CUBE ROOT, 4th ROOT, etc <i>In the calculator,</i> shift $\sqrt{\square}$</p> <p>Rewrite $625^{1/4}$ in radical notation and simplify it</p> <p>Changing calculator from real to imaginary mode, and vice versa <i>In the calculator,</i> Shift $\boxed{\text{MENU}}$, scroll to complex mode $a+bi$</p> <p>Simplify in the calculator $(2i - 4)^2$</p>	<p>GRAPHING ABSOLUTE VALUE, LOGARITHMS, etc <i>In the calculator,</i> Shift $\boxed{4}$, scroll down to abs</p> <p>Graph $y = x + 2$</p> <p>Graph $\log_4 x$ $\boxed{\text{MENU}} \boxed{5}$, $\boxed{\text{SHIFT}} \boxed{4}$ $\boxed{\rightarrow}$ scroll down to $\log a b c$</p> <p>RADIANS AND DEGREES <i>In the calculator,</i> $\boxed{\text{SHIFT}} \boxed{\text{MENU}}$ scroll to Angle</p> <p>Find $\sec 45^\circ$ and $\cos \frac{\pi}{4}$</p>	<p>SIMPLIFYING LOGS WITH BASES OTHER THAN 10 <i>In the calculator,</i> $F4, F2$ from main screen menu 1</p> <p>Simplify $\log_3 27$</p> <p>PERMUTATIONS, COMBINATIONS, AND FACTORIALS <i>In the calculator,</i> $\boxed{\text{OPTN}} \boxed{F6} \boxed{F3}$</p> <p>Simplify $5!$ ${}_{10}C_3$ ${}_{10}P_3$</p>	<p>SIMPLIFYING SYSTEMS OF MATRICES <i>In the calculator,</i> Shift $\boxed{4}$, $\boxed{6}$ scroll to Ref $F4, F1, F3, 2, \text{ent}, 3, \text{ent}$ type in values</p> <p>Write a matrix to represent the equations and solve the system $x - 2y = -10$ $-2x - 3y = -1$</p> <p>MEAN, MEDIAN, MODE, RANGE, INTERQUARTILE RANGE, STANDARD DEVIATION <i>In the calculator,</i> $\boxed{\text{Menu}} \boxed{2}$ enter in $\frac{1}{1}$ $\boxed{F2}, \boxed{F1}$</p> <p>Find the mean, median, etc for 98, 87, 79, 82, 101, 99, 97, 97, 102, 91, 93</p>
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Independent Practice CALCULATOR FUNCTIONS assignment. Complete your assignment on a separate sheet. Show all work.

Simplify in the calculator!

1. $(7 + 3i)^2$
 $40 + 42i$

2. $(2i - 3)(4i + 3)$
 $-17 - 6i$

3. $\sqrt{-68}$
 $2i\sqrt{17}$

4. $\log_4 64$
 3

5. $\sqrt[4]{81}$ 3

6. $7!$
 5040

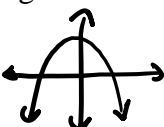
7. ${}_{12}C_4$
 495

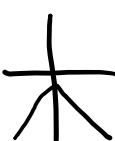

8. ${}_{17}P_5$
 742560

9. $\cos 60^\circ$
 $\frac{1}{2}$

10. $\csc \frac{\pi}{2}$
 1

Graph each of the following in the calculator

11. $y = -x^2 - 2x + 5$ 

12. $y = -|x| - 2$  13. $\log_3 x$ 

Write a matrix to represent the system of equations and then solve the system in the calculator.

14. $-x + 5y - 4z = 0$

$3x + 4y + z = -1$

$-3x + 6y - 7z = 2$

rref $\begin{bmatrix} -1 & 5 & -4 & 0 \\ 3 & 4 & 1 & -1 \\ -3 & 6 & -7 & 2 \end{bmatrix} = \left(\frac{31}{4}, \frac{-17}{4}, \frac{-29}{4} \right)$

15. $x - 3y + z = 6$

$x + 3z = 12$

$y = -5x + 1$

rref $\begin{bmatrix} 1 & -3 & 1 & 6 \\ 1 & 0 & 3 & 12 \\ 5 & 1 & 0 & 1 \end{bmatrix} = \left(\frac{15}{47}, \frac{-28}{47}, \frac{183}{47} \right)$

16. Use the calculator to find the mean, median, mode, range, interquartile range, standard deviation and variance for 75 73 77 79 79 74 81 74 70 68 70 72

$\bar{x} = 74.3$ (mean)

med = 74

mode = 70, 74, 79

range = 13

$\sigma_x = 3.88$ (standard deviation)

IQ range = 7