

Complete the following questions regarding calculator steps/assistance in solving Algebra 1 problems.

What button do I use to solve equations?

1.) $111 = -3(4a - 5)$

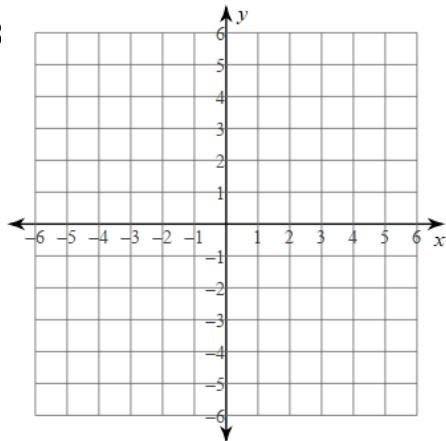
2.) $2 = -8x + 8x$

3.) $4 - 4x = 1 - 5x$

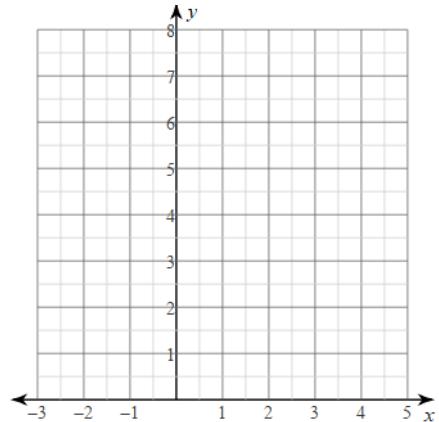
4.) $8 - 8(r + 1) = 5(-2r + 4)$

What button helps you identify points to graph Linear, Quadratic & Exponential Functions? (*remember, to graph Linear functions you can use the y-intercept and rise/run – you do not have to use the calculator).

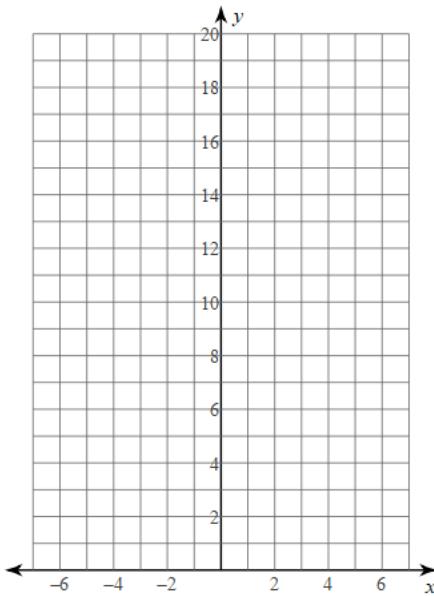
5.) $y = \frac{2}{3}x - 3$



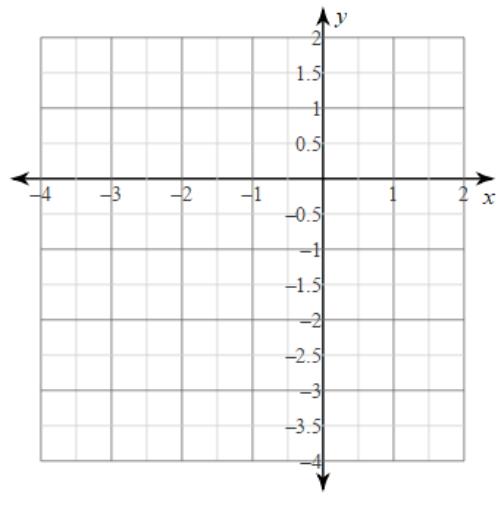
6.) $y = x^2 - 2x + 4$



7.) $y = 5\left(\frac{1}{2}\right)^x$



8.) $y = -(x + 2)^2 + 1$



What button helps me solve systems of equations? What is the only systems method the calculator will solve?

$$9.) \begin{cases} x + 4y = -19 \\ -8x - 3y = -22 \end{cases}$$

$$10.) \begin{cases} -6x - 5y = -29 \\ 4x - 2y = -18 \end{cases}$$

When factoring quadratic expressions/equations, where can I go in the calculator to find the list of factors? What equation do I use?

List the factors of the following numbers:

11.) 24

12.) -81

13.) 122

14.) 236

What button can I use in the calculator to solve a quadratic (or identify the roots), identify the vertex and write the vertex form of a quadratic equation?

15.) $y = 2x^2 + 16x + 31$

16.) $y = -4x^2 - 16x - 19$

Vertex: _____

Vertex: _____

A of S: _____

A of S: _____

Vertex Form: _____

Vertex Form: _____

17.) Solve $5p^2 - 11 = -7p$

18.) Solve $3a^2 + 3a - 21 = 0$

Where do I go in my calculator to complete tables and/or find coordinate points?

Complete the tables below:

19.) $y = 2x - 4$

x	y
-2	
-1	
0	
1	
2	

20.) $y = 2^x$

x	y
-2	
-1	
0	
1	
2	

21.) $y = 2x^2 - 4x - 10$

x	y
-2	
	-10
3	
5	
	230

Where do we go to find data values such as the following: mean, median, range & 5-summary statistics for box-and-whisker plots in the calculator?

Find the mean, median, mode and range of the data sets.

22.) {22, 37, 19, 25, 37, 51, 82}

Mean: _____

Med: _____

23.) {109, 104, 96, 103, 104, 107, 98}

Mean: _____

Med: _____

Mode: _____

Range: _____

Mode: _____

Range: _____

Calculate the five summary statistics for a box-and-whisker plot of the data sets.

24.) {44, 64, 32, 44, 48, 59, 73, 51, 96, 65}

Min: _____ Q₁: _____ Med: _____

25.) {7, 9, 11, 12, 18, 30, 31}

Min: _____ Q₁: _____ Med: _____

Q₃: _____ Max: _____

Q₃: _____ Max: _____

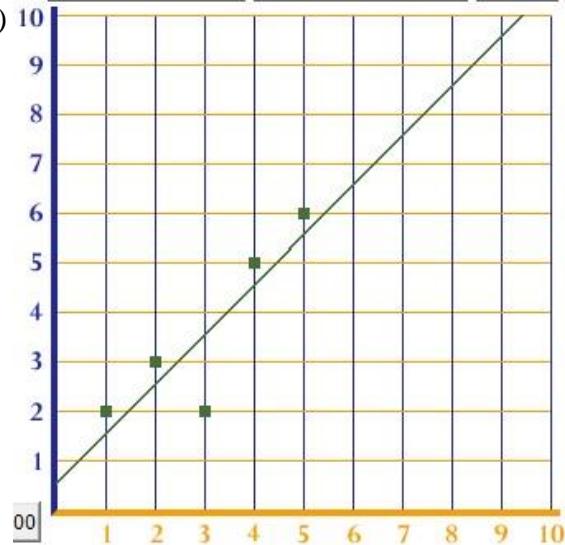
What button do I use in my calculator to calculate the line of best fit and correlation coefficient?

Calculate the line of best fit and correlation coefficient given the table/graph.

26.)

Sandwich	Total Fat (g)	Total Calories
Hamburger	9	260
Cheeseburger	13	320
Quarter Pounder	21	420
Quarter Pounder with Cheese	30	530
Big Mac	31	560
Arch Sandwich Special	31	550
Arch Special with Bacon	34	590
Crispy Chicken	25	500
Fish Fillet	28	560
Grilled Chicken	20	440
Grilled Chicken Light	5	300

27.)



A (slope): _____ B (y-int): _____

A (slope): _____ B (y-int): _____

y = _____

y = _____

Correlation Coefficient: _____

Correlation Coefficient: _____

Answer the following questions:

What button do I use to clear a data table?

How do I change a percent to a decimal?

How do I change a fraction to a decimal or decimal to a fraction?

What button gives me the square root symbol (radical symbol)?

What button gives me an exponent power other than the value of 2?