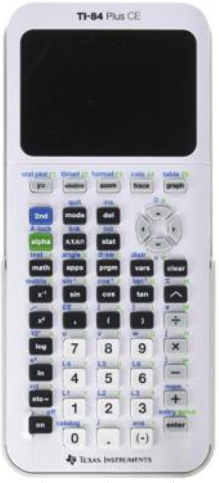
Summer Assignment (SA) Part 1 Notes

Thursday, May 16, 2019 10:13 AM

Part 1: Getting to know your calculator:
TI 84 Plus or TI 84 Plus CE



Watch: https://www.youtube.com/watch?v=hNg3MRGXd0M

1. On/Off
   - ☐ I can turn my calculator on and off
2. Fraction button $\frac{\square}{\square}$
   - ☐ I know how to get to the fraction button two ways
     - ★ $alpha$ X,T,θ,n or $alpha$ $y=$
3. Add $+$
   - ☐ I know where the add button is
   - ☐ I showed it by doing #1-5
4. Subtract $-$
   - ☐ I know where the subtract button is
   - ☐ I showed it by doing #6-10
5. Multiply $\times$
   - ☐ I know where the multiply button is
   - ☐ I showed it by doing #11-15
6. Divide $\div$
   - ☐ I know where the divide button is
   - ☐ I showed it by doing #16-20
7. Recall buttons
   - ☐ I will use 2nd, enter to pull up a previous line
   - ☐ I will use 2nd, (-) to pull up the previous answer
8. Exponent x^2
   - ☐ I know where the squared button is
   - ☐ I know where the "carrot" button is to enter any exponent
   - ☐ I showed it by doing #21-25
9. Radical $\sqrt{x}$
   - ☐ I know where the square root button is
   - ☐ I know that under the math key there is a cube root, and any root key
   - ☐ I showed it by doing #26-28
10. Variables x, y, z, a, b, c …
    - ☐ I know where the X key is (AND WILL USE IT OFTEN)
11. 2nd mode/quit
    - ☐ I know I can use 2nd mode/quit commands anytime to return to the home screen
12. Store Value
    - ☐ I know how to store a number as x and use it to check my answer
    - ☐ I showed it by doing #29

13. Enter equation into $y =$
    - ☐ I can enter an equation into y_1, y_2 or any of the others
        - ☐ I showed it by doing #30

a. Graph
- ☐ I know how to graph on a standard xy-plane
    - ★ $zoom$
      $6{:}\,ZStandard$
- ☐ I know where the window button is

b. Graph command center
- ☐ I know how to get to the graph command center and use the first one
    - ★ $2nd$
      $trace/calc$

c. Table
- ☐ I know how to open the table
    - ★ $2nd$
      $window$
- ☐ I know where the table set button is

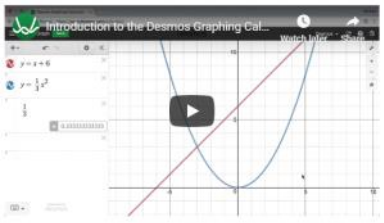
SA Part 2 Notes

Sunday, May 19, 2019 5:49 PM

Part 2: Getting to know the FREE online graphing calculator: DESMOS

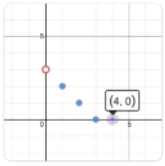
Go to: https://learn.desmos.com/graphing Watch and Learn!

1. Watch the Intro video
   2 min



Below that video under "Next Steps"

2. Watch the "Points" video
   1 min

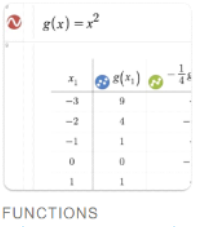


3. Watch "Graph Settings"
   1 min

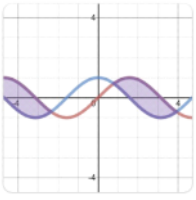
4. Watch "Keyboard Shortcuts"
   1 min

5. Watch "Tables"
   1 min

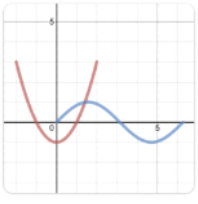
6. Watch "Functions"
   1 min 25 sec



7. Watch "Inequalities"
   1 min 10 secs



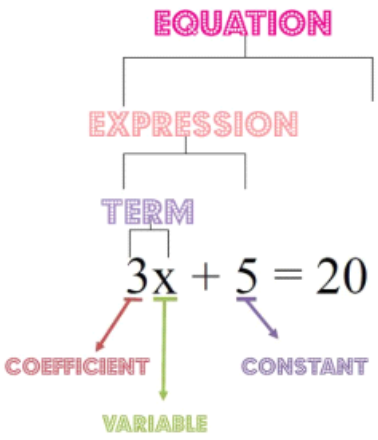
8. Watch "Restrictions"
   1 min

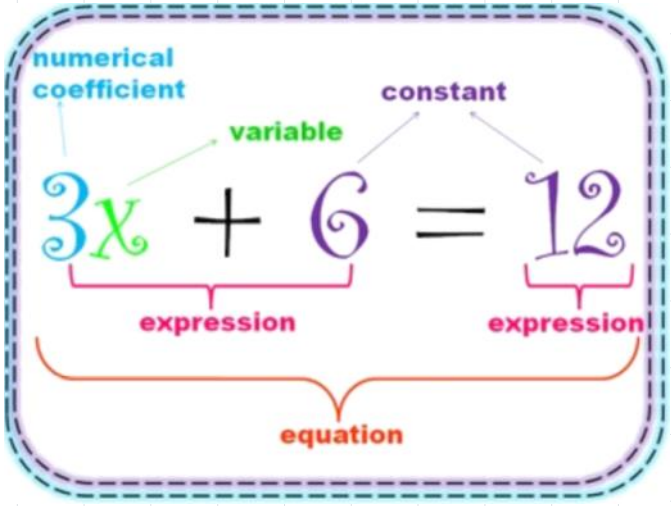


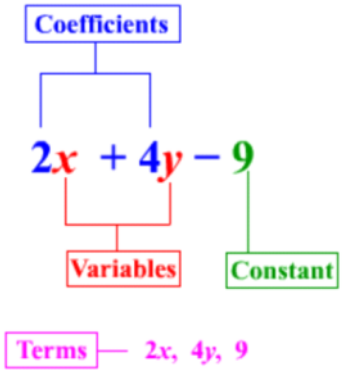
9. Watch "Sliders"
   1 min

Part 3: Algebra Vocab & Solving One Step Equations

Watch: https://www.youtube.com/watch?v=y_BOvLU1G2U







VOCAB

Equation	an equation has an equal sign
Expression	an expression is a collection of terms, no equal sign
Term	a term is made up of coefficients and variables, terms are separated by positive(addition) and negative(subtraction) signs
Coefficient	the coefficient is the number in front of the variable, there is always a coefficient, the coefficient of 1 is (invisible) not written but is still there
Variable	a variable is a letter standing in for an unknown number
Constant	a constant is a standalone number, not attached to a variable

Solving One-Step Equations

ADDITION

Property of equality

If the same number is added to both sides of an equation, the two sides remain equal.

$If\ a = b, then\ a + c = b + c.$

Example

Solve

$x - 5 = 10$
$+5 \quad +5$
$x = 15$

Check

$x - 5 = 10$
$15 - 5 = 10$
$10 = 10$

SUBTRACTION

Property of equality

If the same number is subtracted from both sides of an equation, the two sides remain equal.

$If\ a = b, then\ a - c = b - c.$

Example

Solve

$x + 5 = 10$
$-5 \quad -5$
$x = 5$

Check

$x + 5 = 10$
$5 + 5 = 10$
$10 = 10$

MULTIPLICATION

Property of equality

If the same number is multiplied by both sides of an equation, the two sides remain equal.

$If\ a = b, then\ ac = bc.$

Example

Solve

$\frac{x}{5} = 10$

$5 \cdot \frac{x}{5} = 5 \cdot 10$

$x = 50$

Check

$\frac{x}{5} = 10$

$\frac{50}{5} = 10$

$10 = 10$

DIVISION

Property of equality

If the same number is divided by both sides of an equation, the two sides remain equal.

$If\ a = b, then\ \frac{a}{c} = \frac{b}{c}$

Example

Solve

$5x = 10$

$\frac{5x}{5} = \frac{10}{5}$

$x = 2$

Check

$5x = 10$
$5(2) = 10$
$10 = 10$

Examples

1. $-3 + x = 6$

2. $x + 4 = 11$

3. $\frac{x}{2} = -7$

4. $5x = 25$

5. $\frac{2}{3}x = -6$