




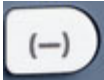


What do you need to know about the TI-30XS calculator?

The math section of the GED is divided into two sections. You can not use a calculator for the first section, which is 5 questions. You can use a calculator for the second section. Even in the section where the calculator is allowed, you won't need it for many of the questions. You can use a calculator for the Math, Science, and Social Studies sections of the GED.

However, it is important that you are comfortable with the calculator so that it can be used as a support in the calculator-allowed section of the test.

Some things test takers should know about the calculator:



- Use  instead of $=$.
- To erase screen: 
- Use the arrow keys to move the cursor. This includes moving up to previous calculations: 
- Basic arithmetic operations (multiplication, division, addition, subtraction).
- The difference between the *negative number* key and the *subtraction* key.
 - Negative sign: 
 - Subtraction: 
- Convert from fraction to decimal: 

Practice:

a. What fraction is equivalent to 0.875?


b. What is -344 divided by 4?

c. What is -24 times 3?

d. Which is smaller, $\frac{7}{9}$ or 0.875?

e. What is the difference between the coldest temperature you've ever experienced and the hottest temperature you've experienced?


Exponents

- Taking a number to the 2nd power (squaring) can be done with the x^2 key. First press the number you want to square and then press .

For example:

To find 13^2 , you would press 13 and then



- To raise numbers to other exponents (higher than the second power), first press the base number, then  and then the exponent.

For example:


To find 2^6 , press 2, then



, then 6.

Practice:

- $17^2 =$
- $7^4 =$
- Which is bigger, 2^3 or 3^2 ?
- Put these in size order: 2^6 4^3 8^2
- Which is greater, 6^5 or 5^6 ?

You will notice that some buttons have words or symbols above them in green. You can use these functions by pressing the  button.


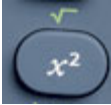
For example, to turn off calculator: Press



, and then


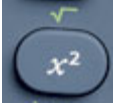


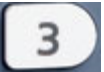


Roots

- Square roots: , , the number you want to find the square root of.

- Cube roots: , , 

For example:

To find the square root of 144: , , 144

To find the cube root of 216: , , , 216

Note: The GED is limited to square roots (“to the 2nd power”) and cube roots (“to the 3rd power”).

Practice:

- What is the square root of 961?
- What number times itself equals 784?
- What is the cube root of 1728?

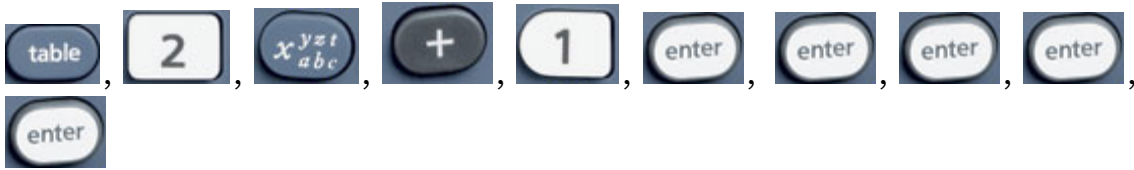
Decide if each of the next three statements is True or False.

If False, rewrite the statement so that it is true:

- The square root of 16 is 256.
- The cube root of 9 is 3.
- The cube root of 343 is larger than the square root of 49.

Useful, but not necessary:

- Creating in-out tables from functions ($y = 2x + 1$, for example):



- To enter a fraction into the calculator, press  , then the numerator, then the

down arrow  , then the denominator, then the right arrow  .

Don't worry too much about this. It is better to focus on understanding fractions, rather than how to calculate them with this particular calculator.

- Holding on and hitting clear will empty memory:



- Convert number to percent:



- Scientific notation:

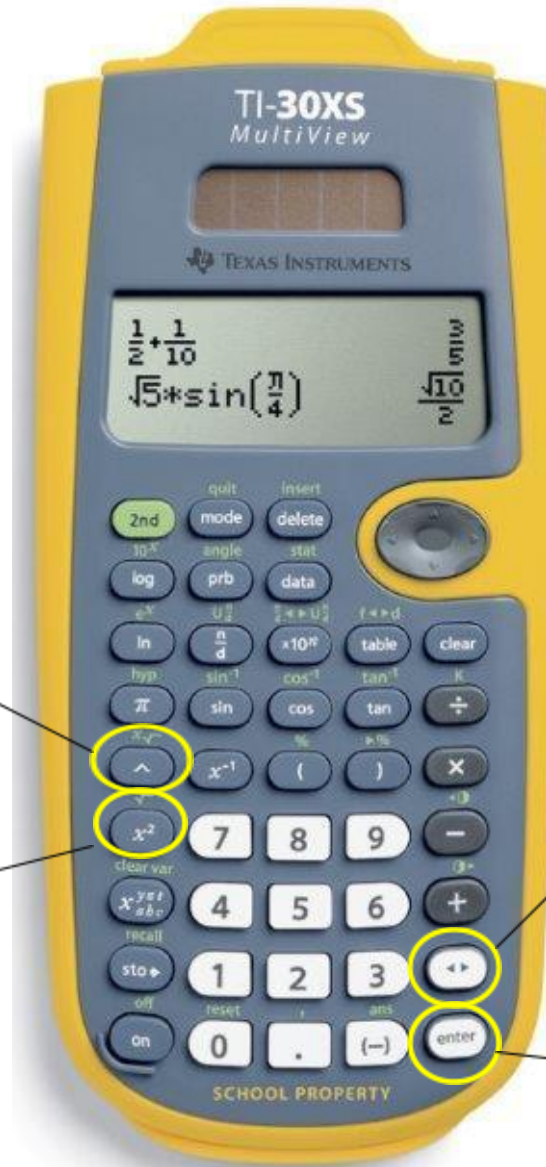


Some things you do not need to know for the test:

- Logarithms
- Trigonometry (sin, cos, tan)
- Pretty much all of the other buttons.

Additional Resources:

- GED Tutorial on using the virtual TI-30XS:
<https://ged.com/practice-test/en/calculator/>
- GED Calculator Reference Sheet:
https://ged.com/wp-content/uploads/calculator_sheet.pdf



Raising a number to a power (& cube roots)

Squaring numbers (& finding the square roots)

Converting between decimals and fractions

Negative numbers