

Absolute Value Classic View

Objectives:

- Review absolute value
- Identify when additional parentheses are needed for Classic View
- Calculate absolute value using the MATH menu

Review absolute value

- Absolute value creates a non-negative answer.

$$|-2| = 2$$

$$|5| = 5$$

$$|0| = 0$$

- Absolute value can be a grouping symbol. When evaluating, completely resolve the inside first.
- **IMPORTANT:** $|x|$ and x are not the same. A variable x can represent a positive, negative, or zero, but $|x|$ can't be negative. We cannot ignore or "remove" the absolute value.

Identify when additional parentheses are needed

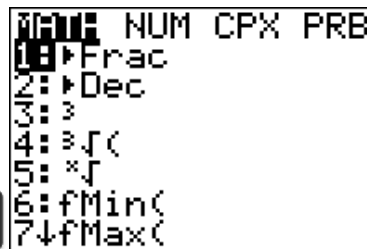
Caution: Classic view calculators open the first parenthesis, but you have to type the closing parenthesis



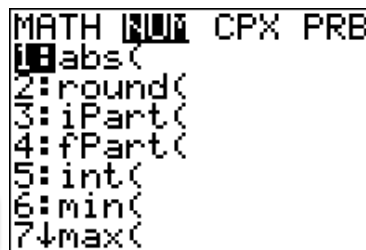
when the vertical bars enclose a group.

Example 1: $|3 - 17 \cdot 2|$ means $|(3 - 17 \cdot 2)|$

Calculate absolute value using the MATH menu



To enter the MATH menu, press



To move to the NUM menu, press



To select absolute value, press

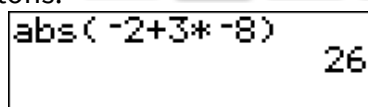


Example 2: Calculate $|-2 + 3(-8)|$

Press these buttons:



see this screen:



Example 3: Calculate $|-2| + 3(-8)$

Press these buttons:

abs(-2)+3*-8
-22

see this screen

Try It!

Calculate.

- 1) $\left| \frac{17-5}{2-5} \right|$
- 2) $|-1(12)| - 3|-2|$
- 3) $\frac{-3+6}{|2-7| - |-2|}$
- 4) $\frac{2+3|5-(-1)|}{11+2(-3)}$
- 5) $\frac{|7-11|}{|4-8|} - \frac{2|23-19|}{|-3-1|}$

Answers:

1)

math $\rightarrow$ enter (1 7 -)
5) $\div$ (2 - 5)
abs((17-5)/(2-5))
4

2)

math $\rightarrow$ enter (-) 1 $\times$ 1
2) - 3 $\times$ math $\rightarrow$
enter (-) 2) enter
abs(-1*12)-3*abs(-2)
6

3)

((-) 3 + 6) $\div$
(math $\rightarrow$ enter 2 - 7)
) - math $\rightarrow$ enter (-) 2)
(-3+6)/(abs(2-7)-abs(-2))
1

4)

(2 + 3 math $\rightarrow$ enter
5 - (-) 1)) $\div$
(1 1 + 2 $\times$ (-)

5)

(2+3abs(5-(-1)))/(11+2*-3)
4
math $\rightarrow$ enter 7 - 1 1
) $\div$ math $\rightarrow$ enter 4 -
8) - 2 $\times$ math $\rightarrow$
enter 2 3 - 1 9)
 $\div$ math $\rightarrow$ enter (-) 3 -

abs(7-11)/abs(4-8)-2*abs(23-19)/abs(-3-1)
-1