

1

Solve the equation below:

$$|-2x| = 6$$

Mr. Watters

- A) $x = \{-4, 4\}$
- B) $x = \{-3, 3\}$
- C) $x = \{-12, 12\}$
- D) $x = \{-8, 8\}$
- E) $x = \{-2, 2\}$

5

Solve the equation below:

$$3|k + 5| = 18$$

- A) New Year's Eve
- B) Thanksgiving
- C) Day night
- D) Groundhog Day
- E) First day of school

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9

Solve the equation below:

$$2|3r - 9| - 1 = 23$$

- A) $r = \{-7, 7\}$ taking selfies
- B) $r = \{1, 7\}$ posting on Twitter
- C) $r = \{-7, 1\}$ eating waffles
- D) $r = \{-1, 7\}$ singing karaoke
- E) $r = \{-7, -1\}$ playing harmonicas

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ABSOLUTE VALUE EQUATIONS

MATH LIB ACTIVITY

Created by: ALL THINGS ALGEBRA

ABSOLUTE VALUE EQUATIONS

"Math Lib" Activity!

Objective: To practice solving absolute value equations. This includes problems in which students will need to isolate the absolute value expression.

Activity Directions: Print and post the ten stations around the room. Give each student the worksheet to record their work as they travel to the stations. Group students (I typically do groups of 3) and assign to a starting problem. Set the timer for 3-4 minutes (more if needed). Students solve the problem at the station, recording their work on their recording worksheet. They look for their answer and record the piece to the story on the math lib. When the timer goes off, they move to the next station.

You are able to edit each slide to change the teacher name and all story elements to personalize for your students. PowerPoint is required to edit the slides. They enjoy seeing which one of their teachers is the "star" of the story!

Station 1: Solve the equation below:
 $-2|x| = 6$
 A) $x = \{-4, 4\}$
 B) $x = \{-3, 3\}$
 C) $x = \{-12, 12\}$
 D) $x = \{-8, 8\}$

Station 5: Solve the equation below:
 $3|k + 5| = 18$
 A) $\{-1, 1\}$
 B) $\{1, 11\}$
 C) $\{-11, 1\}$
 D) $\{1, 11\}$
 E) $\{11, -1\}$

Station 9: Solve the equation below:
 $2|3r - 9| - 1 = 23$
 A) $r = \{-7, 7\}$
 B) $r = \{1, 7\}$
 C) $r = \{-7, 1\}$
 D) $r = \{-1, 7\}$
 E) $r = \{-7, -1\}$

Math Lib Story Template:
 Absolute Value Equations "MATH LIB!"
 Directions: Solve the problem at each station. Identify the answer and fill in the blanks on the back to complete the story.

Recording Sheet:
 "WRITE YOUR MATH LIB BELOW!"
 (1) _____ was (2) _____
 to be (3) _____ with
 (4) _____ on (5) _____ in
 (6) _____ at (7) _____ while wearing _____

10 Stations & Student Worksheet
 (All story elements are editable!)