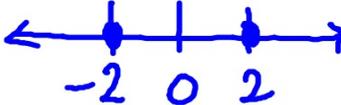


1.7 Absolute Value Equations and Inequalities

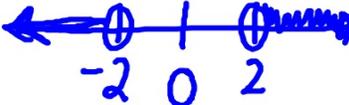
Sept 10

What does the absolute value of a number show?

3 types of absolute value equations or inequalities:

- $|a| = 2$ $a = 2, -2$ 

A number line with tick marks at -2, 0, and 2. Solid dots are placed at -2 and 2. Arrows point outwards from these dots, indicating that the solution set consists of the two discrete points -2 and 2.
- $|a| < 2$ $-2 < a < 2$
 $a > -2$ and $a < 2$ 

A number line with tick marks at -2, 0, and 2. Open circles are placed at -2 and 2. A thick shaded line connects the two circles, representing the interval between -2 and 2. An arrow labeled 'a' points to the shaded region.
- $|a| > 2$ $a < -2$ OR $a > 2$ 

A number line with tick marks at -2, 0, and 2. Open circles are placed at -2 and 2. Arrows point outwards from each circle, representing the regions where a is less than -2 or greater than 2.