LESSON 2-5 Solving Equations Involving Absolute Value

You will learn to:

Evaluate absolute value expressions

Solve absolute value equations

Aug 23-10:09 AM

Remember absolute value:

|4| = |-5| =

What about |x| = 6; x = ?

Aug 23-10:13 AM

Evaluate $|m + 6| - 14$ if $m = 4$.

Aug 23-10:14 AM

1. Evaluate $23 - |3 - 4x|$ if $x = 2$.

Aug 23-10:15 AM

Solve each equation. Then graph the solution set.

a. $|f + 5| = 17$

b. $|b - 1| = -3$

Aug 23-10:16 AM

2A. $|y + 2| = 4$

2B. $|3n - 4| = -1$

Aug 23-10:17 AM

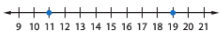
SNAKES The temperature of an enclosure for a pet snake should be about 80°F, give or take 5°. Find the maximum and minimum temperatures.

Aug 23-10:19 AM

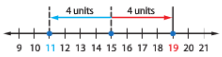
3. **ICE CREAM** Ice cream should be stored at 5°F with an allowance for 5°. Write and solve an equation to find the maximum and minimum temperatures at which the ice cream should be stored.

Aug 23-10:20 AM

Write an equation involving absolute value for the graph.



Find the point that is the same distance from 11 and from 19. This is the midpoint between 11 and 19, which is 15.

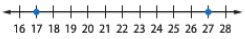


The distance from 15 to 11 is 4 units.
The distance from 15 to 19 is 4 units.

So an equation is $|x - 15| = 4$.

Aug 23-10:21 AM

4. Write an equation involving absolute value for the graph.



Aug 23-10:22 AM

Do Now:

p 105, # 1-12

Aug 23-10:23 AM