6.4 Absolute Value

EQ: How can you use integers to represent distance?

Absolute Value: the distance between a number and zero on the number line.

Absolute value is \textit{Always Positive} because distance is always positive.

\[ |12| = 2 \]
\[ |-5| = 5 \]
\[ |-7| = 7 \]

Example 1:

Example 2: Compare \( >, \leq, \text{ or } = \)

\[ 1 \leq |1-4| \]
\[ 1 < 4 \]

Example 3: Order from least to greatest

\[ |-5|, 2, |1-11|, 0, |1-3| \]

5 2 1 0 3

Summary

0, |1-11|, 2, |1-3|, |1-5|