

Exercise 59

In the following exercises, fill in $<$, $>$, or $=$ for each of the following pairs of numbers.

(a) $|-7|$ ___ $-|-7|$

(b) 6 ___ $-|-6|$

(c) $|-11|$ ___ -11

(d) $-(-13)$ ___ $-|-13|$

Solution

The absolute value sign gets rid of the minus sign within it.

Part (a)

$$|-7| \text{ ___ } -|-7|$$

$$(7) \text{ ___ } -(7)$$

$$7 > -7$$

Part (b)

$$6 \text{ ___ } -|-6|$$

$$6 \text{ ___ } -(6)$$

$$6 > -6$$

Part (c)

$$|-11| \text{ ___ } -11$$

$$(11) \text{ ___ } -11$$

$$11 > -11$$

Part (d)

$$-(-13) \text{ ___ } -|-13|$$

$$13 \text{ ___ } -(13)$$

$$13 > -13$$