

Exercise 62

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

(a) $-|-4|$ ___ $-|4|$

(b) 5 ___ $-|-5|$

(c) $-|-10|$ ___ -10

(d) $-|-0|$ ___ $-(-0)$

Solution

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

Part (a)

$$-|-4| \text{ ___ } -|4|$$

$$-(4) \text{ ___ } -(4)$$

$$-4 = -4$$

Part (b)

$$5 \text{ ___ } -|-5|$$

$$5 \text{ ___ } -(5)$$

$$5 > -5$$

Part (c)

$$-|-10| \text{ ___ } -10$$

$$-(10) \text{ ___ } -10$$

$$-10 = -10$$

Part (d)

$$-|-0| \text{ ___ } -(-0)$$

$$0 = 0$$