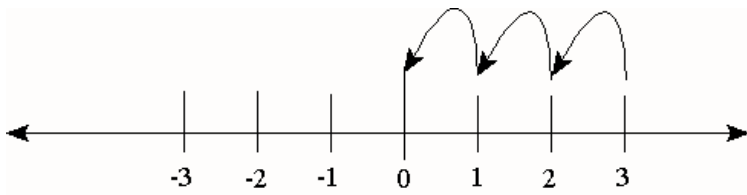


## 2-1-2 Absolute Value $|a|$

$|3|$  is read "the absolute value of three."  $|-3|$  is read "the absolute value of negative three."

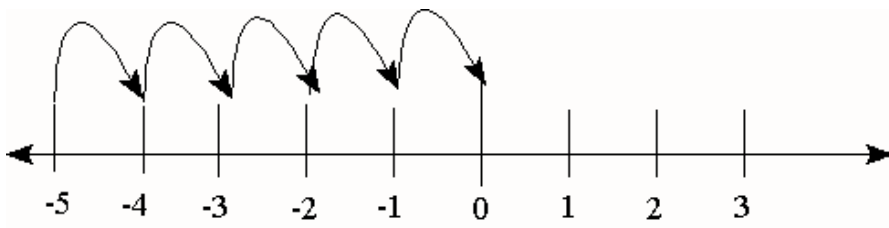
$|3|$  asks how far away from zero is three."  $|-3|$  asks how far away from zero is negative three."



The answer to an absolute value question is never a negative number.

What is  $|5|$ ? Five is five units from zero so  $|5|=5$

What is  $|-5|$ ? Negative five is five units from zero so  $|-5|=5$



Practice: Simplify the following.

a)  $|398|=$   $|-398|=$   $|-3.14|=$

b)  $|-2/3|=$   $|5 \frac{2}{3}|=$   $|-2.35|=$

c)  $|245-34|=$   $|\pi|=$   $|-98|=$

Hint: Work the subtraction first.

d)  $|-7|=$   $|-8|=$   $|B|=$

e)  $|12|=$   $|-2.6|=$   $|-e|=$

f)  $|2 \frac{1}{3}|=$   $|-3 \frac{1}{3}|=$   $|3.682|=$

g)  $|4 \frac{1}{2}|=$   $|-6|=$   $|4.642|=$

h)  $|3|=$   $|-2|=$   $|-6.42|=$

i)  $|789 - 234|=$   $|5000 - 2458|=$   $|3210 - 2987|=$

j)  $|43 - 35|=$   $|624 - 34|=$   $|324 - 58|=$