

## 6.2 Comparing and Ordering Integers

ESSENTIAL QUESTION: How can you use a number line to compare integers?

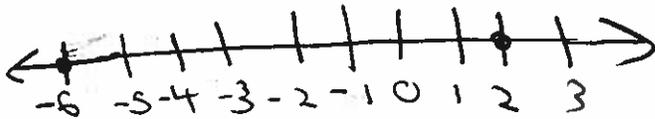
On a horizontal number line, numbers to the left are less than numbers to the right. Numbers to the right are greater than numbers to the left.

### EXAMPLE 1

Comparing Integers on a number line.

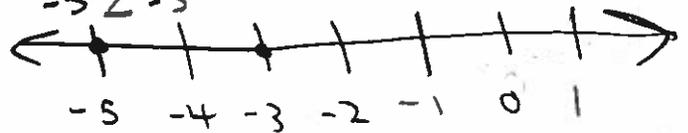
1) Compare 2 and -6.

2 is to the right of -6 so  $2 > -6$



2) Compare -5 and -3.

-5 is to the left of -3 so  $-5 < -3$



On Your Own

Copy and complete the statement using < or >.

1)  $0 > -4$

2)  $-5 < 5$

3)  $-8 < -7$

### EXAMPLE 2

Order the integers from least to greatest.

1) -4, 3, 0, -1, -2      $-4, -2, -1, 0, 3$

2) -2, -3, 3, 1, -1      $-3, -2, -1, 1, 3$

3) 4, -7, -8, 6, 1      $-8, -7, 1, 4, 6$

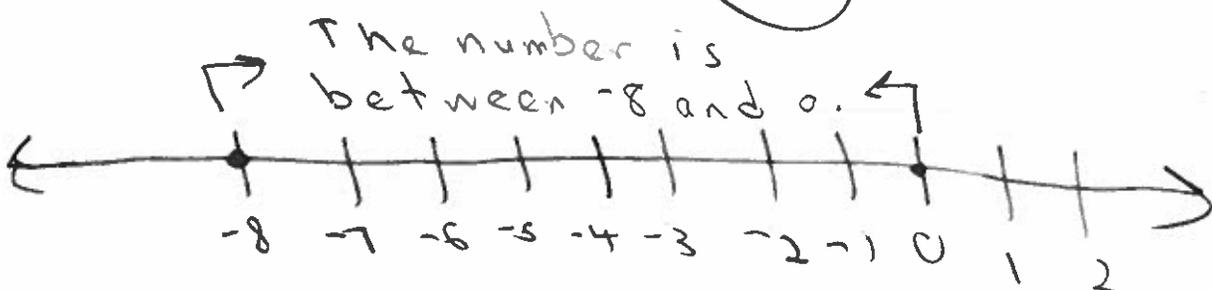
**A number is greater than -8 and less than 0. What is the greatest possible integer value of this number?**

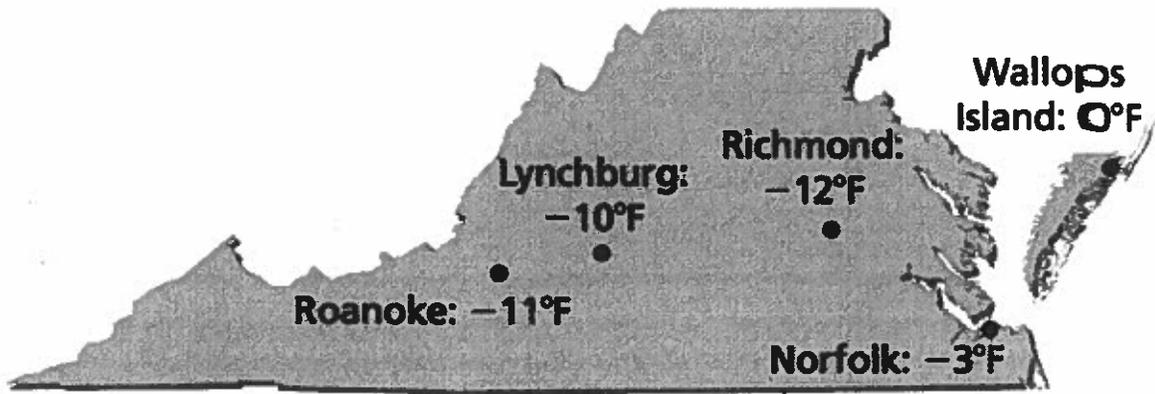
**(A)** -10

**(B)** -7

**(C)** -1

**(D)** 2





The diagram above shows the coldest recorded temperatures for several cities in Virginia.

1) Which city has the coldest recorded temperature? *Richmond*

2) Has a negative Fahrenheit temperature ever been recorded on Wallops Island? Explain.

*No, because it says the coldest recorded temperature for Wallops Island is 0°.*