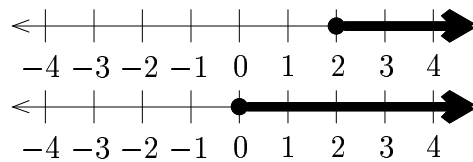# 2.7A AND or OR

A. AND

The word "AND" means both must be true.

Goal: Given **two** shaded number lines, determine where they are **both** shaded in
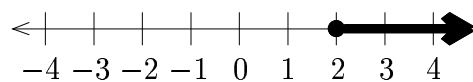
B. Examples of AND
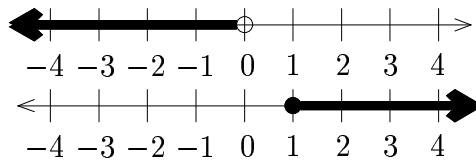
Example 1:

Find the AND graph.

Solution

We shaded on a new line, where it is shaded on both:
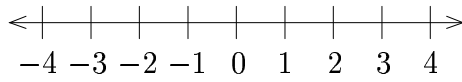

Note: Graphically, AND means "overlap".
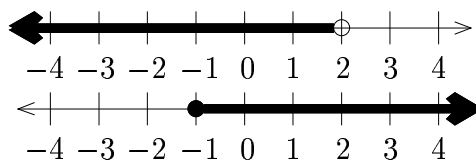
Example 2:

Find the AND graph.

Solution

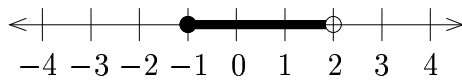Where is it shaded on both lines? Nowhere:

Example 3:

Find the AND graph

Solution

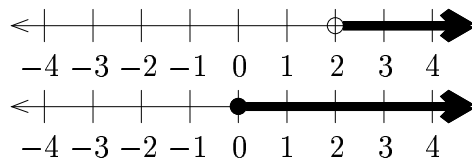Shade in where it is shaded on both:

C. OR

The word "OR" means only one needs to be true.

Goal: Given **two** shaded number lines, determine where they are shaded **on at least one**.
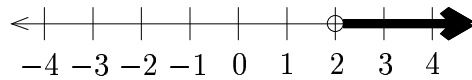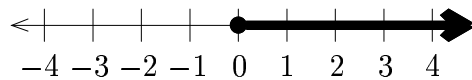
D. Examples of OR (with AND)
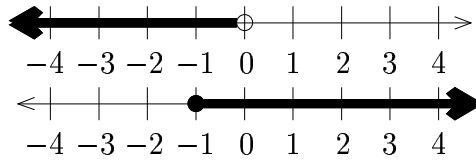
Example 1:

Find the AND and OR graphs

Solution

AND Graph:

OR graph:

Note: Graphically, OR means "put the lines together".
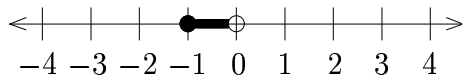
Example 2:

Find the AND and OR graphs.

Solution
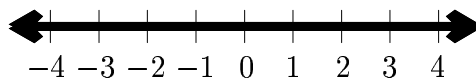
AND Graph:

OR Graph:

Example 3:
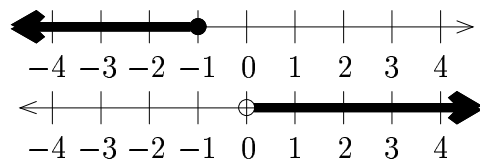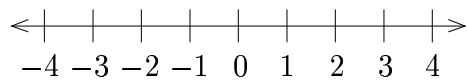

Find the AND and OR graphs.

Solution

AND Graph:

OR graph: