

# Relational Mixed Up Dots

## Ready, set, compare!

Today in Logicland, Lex will show you all about making comparisons between two numbers. Let's dive right in!

## What are Relational Operators?

Below is a list of **relational operators**: symbols we use to compare two numbers (You might recognize these from math!).

Here's how we use relational operators:

$4 > 1$  means 4 is **less than** 1

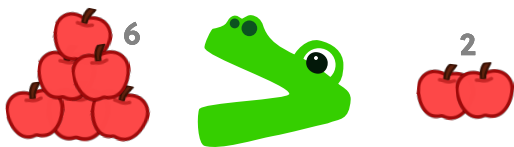
$9 \neq 5$  means 9 is **not equal to** 5

$2 \leq 3$  means 2 is **less than or equal to** 3

Symbol	English
=	Equal to
$\neq$	Not equal to
>	Greater than
<	Less than
$\geq$	Greater or equal to
$\leq$	Less than or equal to

## Hungrily Chompin' Away

Lex brought his friend Allie the Hungry Alligator to demonstrate how you can remember the different **relational operator** symbols.



$6 > 2$  means 6 is **greater than** 2

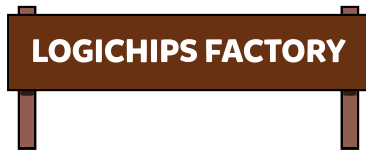


$3 < 7$  means 3 is **less than** 7

Imagine Allie as a less than (<) or greater than (>) symbol. Because Allie is hungry, Allie always wants to eat the **larger** pile of fruit, so her mouth will **open towards the larger pile**. Notice how Allie's mouth always faces the larger number. This is the same way relational operators work!

## Logichips Factory

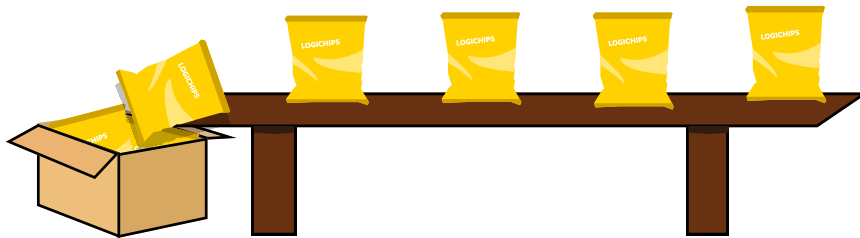
You might be wondering: Why are relational operators **important**, and how can they be used? Let's take a look at an example from Logichips, a potato chip factory at Logicland!



Logichips promises that each bag of potato chips has **at least 15 chips** inside.

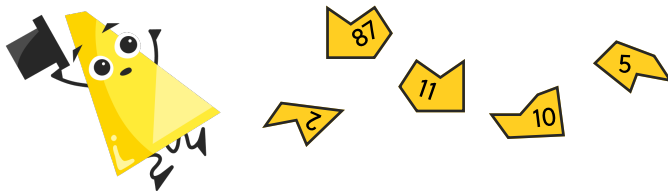
To keep their promise, they have a machine that only packages bags of chips when there are **at least 15 chips** inside. Using relational operators, we can write this as:

**Number of chips  $\geq 15$**

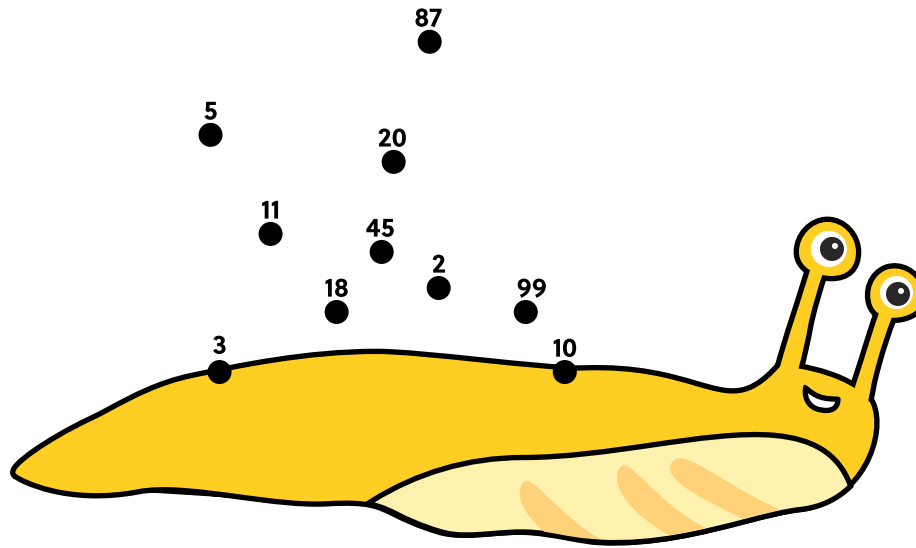


Logichips is thankful for relational operators because they help Logichips decide which bags of chips they package. Accordingly, relational operators help us **make decisions** by **comparing two values** with each other.

## Dot-To-Dot Fun!



Uh-oh, Lex accidentally dropped his dot-to-dot puzzle on the floor! Now, the numbers on his puzzle are all mixed up and out of order. On the next page, use your knowledge of relational operators to **complete the picture** with hints from Lex's friends!



If  $82 = 45$ , connect 2 to 99

If  $12 \leq 13$ , connect 2 to 18

If  $93 \leq 95$ , connect 87 to 10

If  $6 > 9$ , connect 45 to 2



If  $322 \leq 300$ , connect 10 to 18

If  $23 \geq 25$ , connect 45 to 5

If  $92 \geq 65$ , connect 3 to 5



If  $18 > 82$ , connect 87 to 20

If  $28 = 28$ , connect 5 to 87

If  $38 < 10$ , connect 20 to 99



If  $281 > 102$ , connect 99 to 3

If  $87 > 86$ , connect 11 to 20

If  $100 > 1000$ , connect 5 to 11

If  $90 \geq 90$ , connect 18 to 11