Name: _____ Date: _____

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

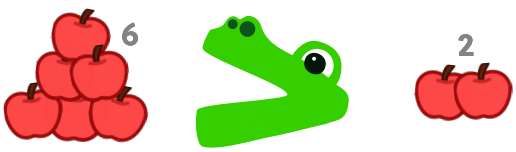
9 ≠ 5 means 9 is **not equal to** 5

2 ≤ 3 means 2 is **less than or equal to** 3

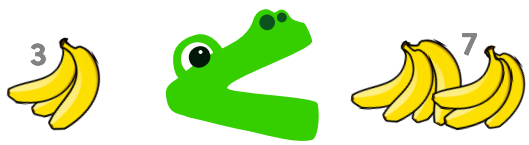
Symbol	English
=	Equal to
≠	Not equal to
>	Greater than
<	Less than
≥	Greater or equal to
≤	Less than or equal to

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**

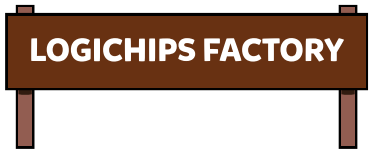


3 < 7 means **3 is less than 7**

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

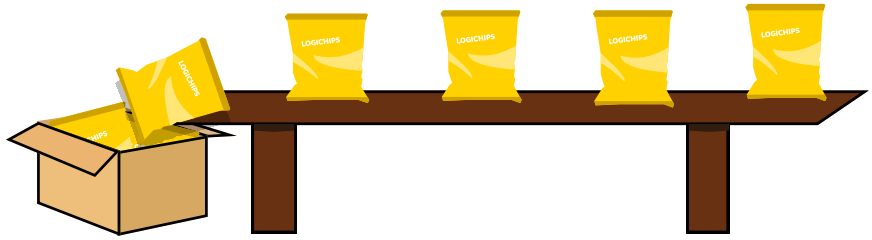
You might be wondering: Why are relational operators **important**, and how can they be used? Let's take a look at an example from Logichips, a potato chip factory at Logicland!



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

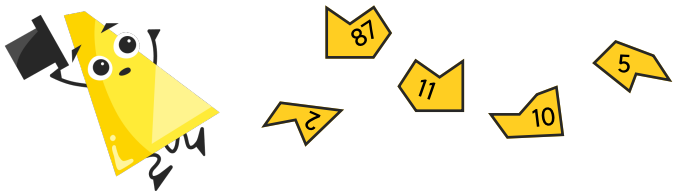
To keep their promise, they have a machine that only packages bags of chips when there are **at least 15 chips** inside. Using relational operators, we can write this as:

Number of chips ≥ 15

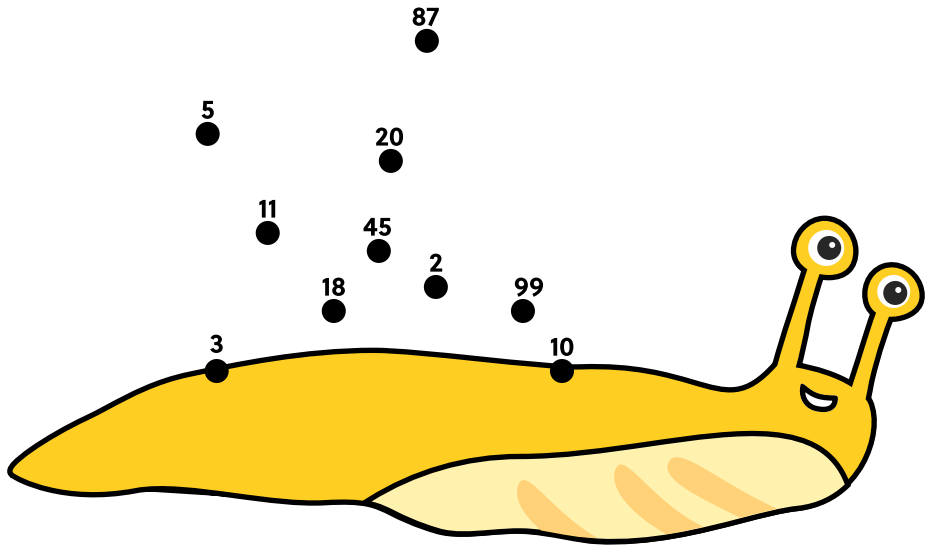


Logichips is thankful for relational operators because they help Logichips decide which bags of chips they package. Accordingly, relational operators help us **make decisions** by **comparing two values** with each other.

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 ≤ 13, connect 2 to 18

If 93 <= 95, connect 87 to 10

If 6 > 9, connect 45 to 2

If 322 ≤ 300, connect 10 to 18

If 23 >= 25, connect 45 to 5

If 92 ≥ 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 >= 90, connect 18 to 11