

Who can I invite to my party?

When do we use variables in equations in real life? Party planning.

Often, parents will tell you that a venue can accommodate a certain number, but that you have to also bring your brother or sister, making the number of friends that you can bring, less than the number that the venue can accommodate.

For example, imagine that you want to do laser tag for your birthday. The venue can hold 20 people. However, your parents tell you that you also have to invite your brother. To figure out how many people you can invite, it would look like this:

$$20 = x + 1$$

In this equation,

- 20 represents the **TOTAL** number of people that can go.
- 1 represents the number of people that you are **FORCED** to invite.
- x represents the number of people that you get to **CHOOSE** to invite.



In this table, solve the equations below each set of numbers. Follow the example.

The total number of people that the venue can hold		The number of people that you get to CHOOSE to invite. You are trying to figure this out.		The number of people that your parents are forcing you to come (siblings, aunts, uncles, etc)
35	=	x	+	6
-6	=	=	-	6
29	=	x		
40	=	x	+	4
15	=	x	+	2
70	=	x	+	8
30	=	x	+	12
100	=	x	+	17