

Setting up an Equation



Two students Ankit and Pankaj were being taught mathematics by their teacher for class-6th



Ankit



Pankaj



Teacher

The teacher asked Ankit to think of a number. Then, asked him to multiply that number by 3 and add 4 to the product. Then she asked Ankit to share the number he got. He says the number is 19. The teacher instantly announced the number Ankit had thought of is 5. Ankit says yes. Pankaj and Ankit were surprised.

Now, everyone wants to know how they got to know the number thought by Rajan. This process is a game known as the mind reader. In this chapter, we will understand and learn how this game works.

When the teacher asked Rajan to think a number, the teacher did not know the number. It could be any number like 1, 2, 3, 4,7,100,1000,etc.

Suppose, we denote this number by a letter say, x . We can also use letters like y or s or some other letter instead of x . When the teacher multiplies x by 3, she gets $3x$. She then adds 4 to the product, which gives $3x + 4$.

Then, the teacher asks Rajan to share his final number. When Rajan gave the final number as 19, we get an equation i.e. $3x + 4 = 19$.



What is an Equation?

When an expression is equal to a quantity which may be a constant or other expression is known as the equation. For example, $3x + 4 = 19$ is an equation.

Here, expression $3x + 4$ is equal to a constant 19.