

## Exemplar Problem

### Mathematical Reasoning

**Which of the following sentences are statements? Justify**

**(v)  $15 + 8 > 23$ .**

**Solution:**

A statement is a declarative sentence if it is either true or false but not both.

So, the given Expression " $15 + 8 > 23$ " is false.

As the result of L.H.S will always equal to the result of R.H.S

Hence, it is a false statement

**(vi)  $y + 9 = 7$ .**

**Solution:**

A statement is a declarative sentence if it is either true or false but not both.

Here,  $y + 9 = 7$  will be true for some value and it will be false for some value.

Like, at  $y = -2$ , the given expression is true and  $Y=1$  or any other value, the expression is false.

Hence, it is not a statement

**(vii) Where is your bag?**

**Solution:**

A statement is a declarative sentence if it is either true or false but not both.

Here, the given sentence "Where is your bag" is a question.

Hence, it is not a statement