One way of solving simultaneous equations is to use the substitution method.

If X subtract two Y equals eight, and X plus Y equals five what are the values of X and Y?

With the substitution method, choose one of the equations to easily isolate X or Y.

For X plus Y equals five, we can subtract Y from both sides to isolate X.

To discover X equals five subtract Y.

Substitute this value of X into the other equation.

X subtract two Y equals eight, becomes five subtract Y subtract two Y equals eight.

Now simplify:

Negative Y subtract two Y is negative three Y.

So five subtract three Y equals eight.

Isolate Y by subtracting five from both sides so that negative three Y equals eight subtract five, which is three.

If negative three Y equals three, divide each side by negative three, which means y equals negative one.

Now substitute the Y value into one of the original equations to get the value of X.

If Y is negative one and X subtract one equals five then X equals six.

That is how to find X and Y using the substitution method.