ANSWERS…..

5.) The sum of a two digit number and the number obtained by reversing the order of the

digits is 121.If the digits differ by 3 find the number.

Solution-

Let the digits be x and y.

Acc. To the question, the number is 10x+y

Therefore reverse of the number will be-

10y+x

Given;

(10y+x)+(10x+y)=121

Or,

11x+11y=121

Dividing L.H.S and R.H.S by 11;

x+y=11------(i)

also,

x-y=3-----(ii)[given]

therefore,

adding (i) and (ii);

x+y=11

x-y=3

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2x=14

x=14/2

x=7.

Since x+y=11(from(i));

Therefore;

7+y=11

y=4

the number is-74.