Question 1

Complete the ordered pairs so that each is a solution for the given of equation.

2x+y=10 (5,_) , (_, 10) , (_, -2), (0,_)

For an ordered pair to be the solution of a given equation it must satisfy the equation.

Hence,

Pair I

2x+y=10 when x=5, then y will be:

2*5+y=10

10+y=10

y=0

Therefore the Pair I = (5,0)

Verification:

For an ordered pair to be the solution of a given equation it must satisfy the equation.

Putting the x=5, y=0 in the given equation.

2x+y=10

2*5+0=10

10=10

Hence verified

Pair II when y=10, then x will be:

2x+y=10

2x+10=10

2x=10-10 (10 transposed so it comes negative)

2x=0 (Dividing both sides by 2)

x=0

Therefore the Pair II = (0,10)

Verification:

For an ordered pair to be the solution of a given equation it must satisfy the equation.

Putting the x=0, y=10 in the given equation.

2x+y=10

2*0+10=10

10=10

Hence verified

Pair III when y=-2, then x will be:

2x+(-2)=10

2x-2=10

2x=10+2

2x=12 (Dividing both sides by 2)

x=6

Therefore the Pair III = (6,-2)

Verification:

For an ordered pair to be the solution of a given equation it must satisfy the equation.

Putting the x=6, y=-2 in the given equation.

2x+y=10

2*6+(-2)=10

12+(-2)=10
10=10
Hence verified

Pair IV when x=0, then y will be:
2x+y=10
2*0+y=10
y=10
Therefore the Pair IV = (0,10)
Verification:
For an ordered pair to be the solution of a given equation it must satisfy the equation.
Putting the x=0, y=10 in the given equation.
2x+y=10
2*0+10=10
10=10
Hence verified