

Ordered pairs subtraction of y-x results in all the numbers

By Luis Felipe Massena Misiec

```
pares = {{12, 5}, {20, 13}, {26, 19}, {30, 23}, {42, 35}, {44, 37}, {56, 49}, {86, 79}, {102, 95}, {104, 97}, {110, 103}, {132, 125}, {146, 139}, {152, 145}, {162, 155}, {174, 167}, {180, 173}, {182, 175}, {186, 179}, {194, 187}, {204, 197}, {210, 203}, {216, 209}, {240, 233}, {254, 247}, {260, 253}, {264, 257}, {272, 265}, {284, 277}, {302, 295}, {312, 305}, {314, 307}, {324, 317}, {326, 319}, {330, 323}, {336, 329}, {356, 349}, {362, 355}, {366, 359}, {380, 373}, {384, 377}};
```

```
xValores = Union[pares[[All, 1]]]; (* Todos os valores distintos de x *)
```

```
yValores = Union[pares[[All, 2]]]; (* Todos os valores distintos de y *)
```

```
subtracoes = Flatten@Table[y - x, {y, yValores}, {x, xValores}]; subtracoesPositivas =  
Select[subtracoes, # > 0 &];
```

```
paresLista = Flatten[pares];
```

```
valoresNosPares = Select[subtracoesPositivas, MemberQ[paresLista, #] &]; (* Exibir os  
resultados *)
```

```
subtracoesPositivas
```

```
valoresNosPares
```

```
v>DeleteDuplicates[%]
```

```
Length[pares]
```

```
Length[v]
```

```
{23, 5, 37, 19, 49, 35, 95, 97, 125, 103, 13, 155, 145, 167, 175, \
```

```
173, 197, 179, 203, 233, 209, 79, 253, 265, 257, 247, 295, 277, 305, \
```

```
307, 187, 139, 317, 329, 323, 319}
```

41

36