

Produktmenge und Relationen

Dokumentnummer: DX1027

Fachgebiet: Mengenlehre

Funktionen

Koordinatendiagramme

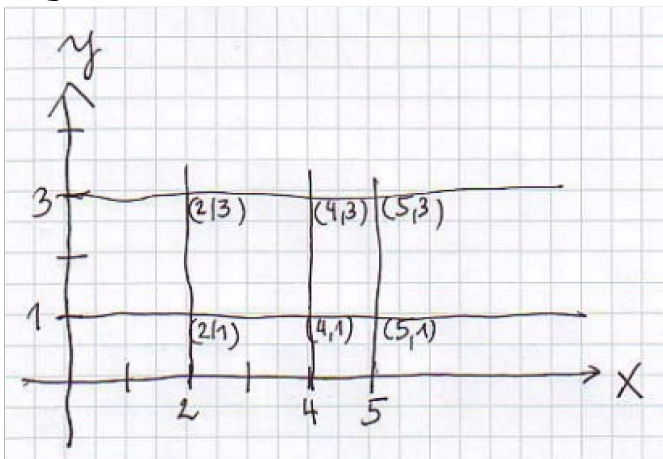
Pfeildiagramme



Einsatz: 2HAK (erstes Lernjahr)

1 Produktmenge

Figure 1:



```
(%i1) A:{2,4,5};B:{1,3};
```

```
(%o1) {2,4,5}
```

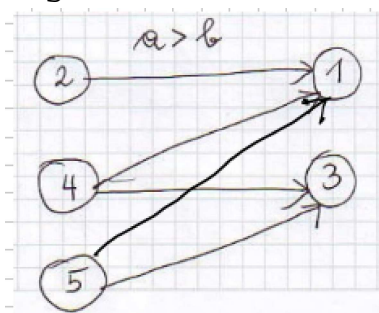
```
(%o2) {1,3}
```

```
(%i3) S:cartesian_product(A,B);
```

```
(%o3) {[2,1],[2,3],[4,1],[4,3],[5,1],[5,3]}
```

2 Relation 1

Figure 2:

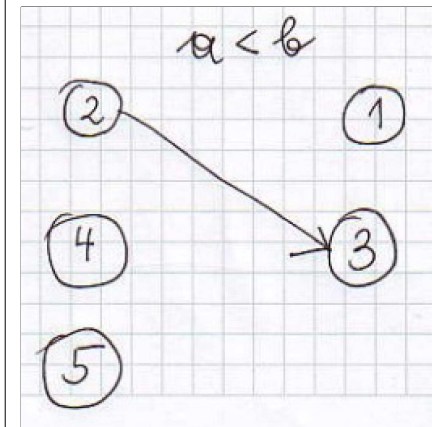


```
(%i4) R1:subset(S,lambd([e],is(e[1]>e[2])));
```

```
(%o4) {[2,1],[4,1],[4,3],[5,1],[5,3]}
```

3 Relation 2

Figure 3:



```
(%i5) R2:subset(S,lambda([e],is(e[1]<e[2])));  
(%o5) {[2,3]}
```