Test Problems for Irregular Packing: THREE

Reference: Alvarez-Valdes et. al (2013);
Shapes: Convex polygons.

Table 1: Description of the instances

Instance	Number of different pieces	Quantity of pieces of each type			Feasible orientations	Plate width
		Piece 1	Piece 2	Piece 3		
THREE	3	1	1	1	0	7
THREEp2	3	2	2	2	0	7
THREEp2w9	3	2	2	2	0	9
THREEp3	3	3	3	3	0	7
THREEp3w9	3	3	3	3	0	9

```
Piece 1

NUMBER OF VERTICES
4
VERTICES (X,Y)
0   0
2  -2
4   0
2   2
```

```
Piece 2

NUMBER OF VERTICES
4
VERTICES (X,Y)
0   0
0  -3
3  -3
3   0
```

```
Piece 3

NUMBER OF VERTICES
3
VERTICES (X,Y)
0   0
4   0
2   3
```

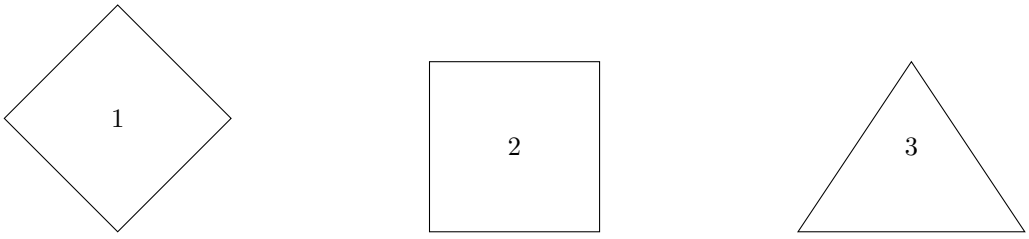

Figure 1: Pieces in THREE instances.

References

Alvarez-Valdes, R., A. Martinez, and J. Tamarit (2013). A branch & bound algorithm for cutting and packing irregularly shaped pieces. International Journal of Production Economics 145 (2), 463 – 477.