

**Where in Europe is Jimbob? Student Worksheet.** Name: \_\_\_\_\_

1	Reflect point A in $y$ axis
2	Label image A'
3	Record coordinates
4	Translate A' 5 left and 12 down
5	Label image A''
6	Record coordinates
7	Reflect A'' in axis $y$
8	Label image A'''
9	Record coordinates
10	<b>CHECKPOINT</b>

11	Translate point B 15 right and 8 down
12	Label image B'
13	Record coordinates
14	Translate B' 1 right and 3 up
15	Label image B''
16	Record coordinates
17	Reflect B'' in axis $x$
18	Label image B'''
19	Record coordinates
20	<b>CHECKPOINT</b>

21	Draw a line segment joining points (0,5) and (5,0)
22	Label point (0,5) T
23	Label point (5,0) P
24	Reflect point C in the line segment $\overline{TP}$
25	Label image C'
26	Record coordinates
27	Reflect C' in axis $x$
28	Label image C''
29	Record coordinates
30	Translate C'' by a vector of $\begin{pmatrix} -5 \\ 6 \end{pmatrix}$
31	Label image C'''
32	Record coordinates
33	<b>CHECKPOINT</b>

34	Join points A', B''' and C' with straight line segments to construct a right-angled triangle
35	Rotate the triangle A'B'''C' 90° anti-clockwise around point A'
36	Label new image points B''' as B'''' and C' as C''''
37	Record coordinates
38	Reflect triangle A'B''''C'''' in $x$ axis
39	Label image of C'''' as C'''''
40	Label image of B'''' as B'''''
41	Draw line segment connecting point C''''' and point C'
42	Draw line segment connecting point B''''' and point C
43	The point at which line segments $\overline{C'''''C'}$ & $\overline{B'''''C}$ intersect is where you find Jimbob!
44	Record the coordinates of this intersection
45	<b>FINAL CHECKPOINT</b>