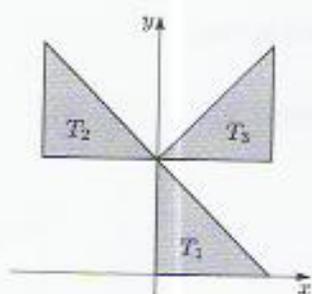


- (b) Consider the three triangles  $T_1$ ,  $T_2$  and  $T_3$  shown below, whose corners are at the following points:

$$T_1 : (0, 0), (1, 0), (0, 1);$$

$$T_2 : (-1, 1), (0, 1), (-1, 2);$$

$$T_3 : (0, 1), (1, 1), (1, 2).$$



Let  $f$  be the reflection that maps  $T_1$  to  $T_2$ , and let  $g$  be the glide reflection that maps  $T_1$  to  $T_3$ .

- Write down  $f$  and  $g$ , each in the form  $q[c, \theta]$ .
- Write down  $f$  and  $g$  in standard form.
- Find the composites  $fg$  and  $gf$  in standard form.

[10]

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