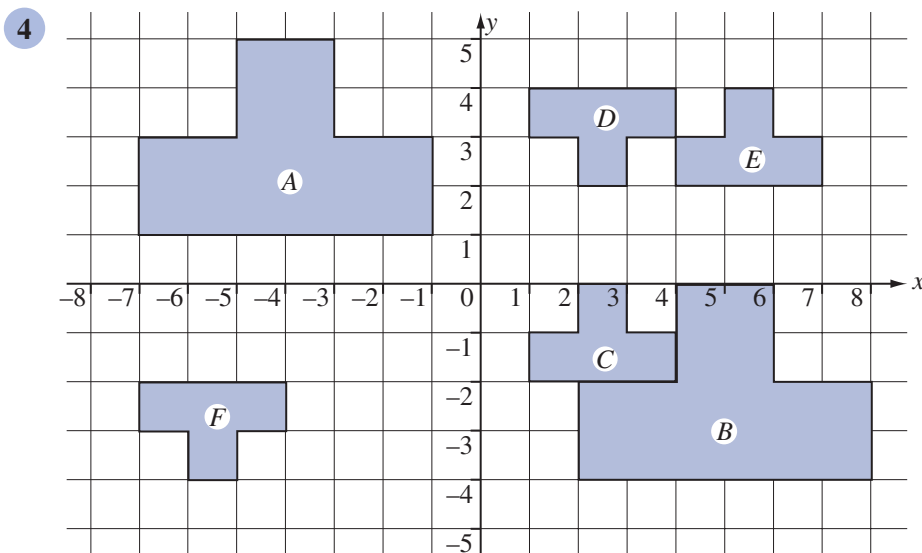


- (a) Describe *fully* the reflection which transforms shape *A* onto shape *B*.
- (b) Describe *fully* the translation which transforms shape *B* onto shape *C*.
- (c) Describe *fully* the rotation which transforms shape *C* onto shape *D*.
- (d) Describe *fully* the translation which transforms shape *D* onto shape *A*.

- 3
- (a) Draw the *x*-axis from  $-4$  to  $8$ .  
Draw the *y*-axis from  $-5$  to  $5$ .  
Draw triangle *A* with vertices of  $(1, 1)$ ,  $(1, 2)$ ,  $(3, 2)$ .
  - (b) Enlarge triangle *A* by scale factor  $2$  about  $(0, 0)$ . Label the image *B*.
  - (c) Rotate triangle *B*  $90^\circ$  anticlockwise about  $(6, 4)$ . Label the image *C*.
  - (d) Translate triangle *C* through  $\begin{pmatrix} -1 \\ -4 \end{pmatrix}$ . Label the image *D*.
  - (e) Reflect triangle *D* in the line  $x = 3$ . Label the image *E*.
  - (f) Rotate triangle *E*  $90^\circ$  clockwise about  $(1, 0)$ . Label the image *F*.



Describe *fully* the transformation which moves:

- (a) shape *A* onto shape *B*.
- (b) shape *B* onto shape *C*.
- (c) shape *C* onto shape *D*.
- (d) shape *D* onto shape *E*.
- (e) shape *E* onto shape *F*.