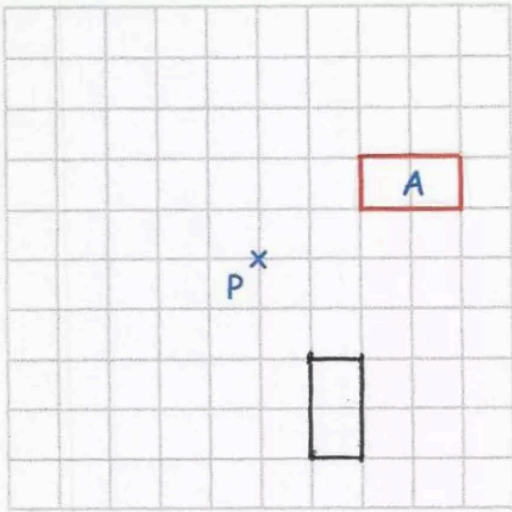
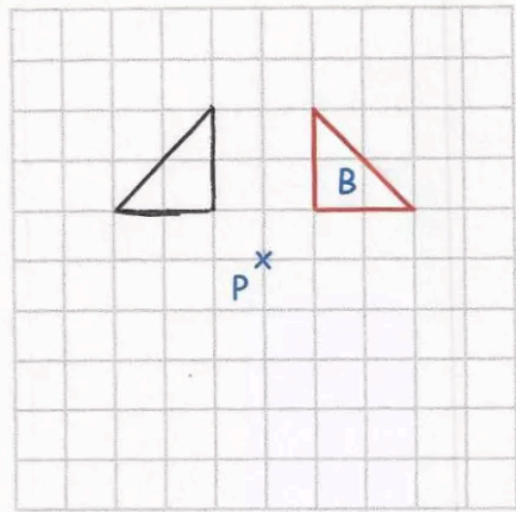


Q1(a)



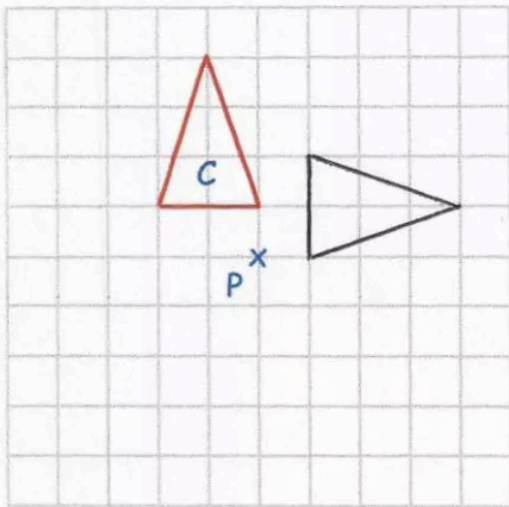
rotate  $90^\circ$  clockwise about P

Q1(b)



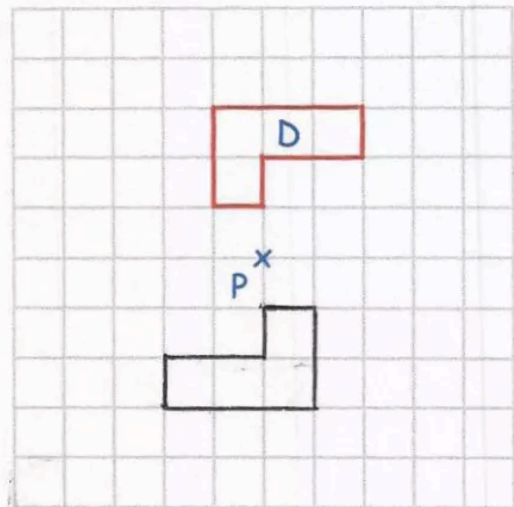
rotate  $90^\circ$  anticlockwise about P

Q1(c)



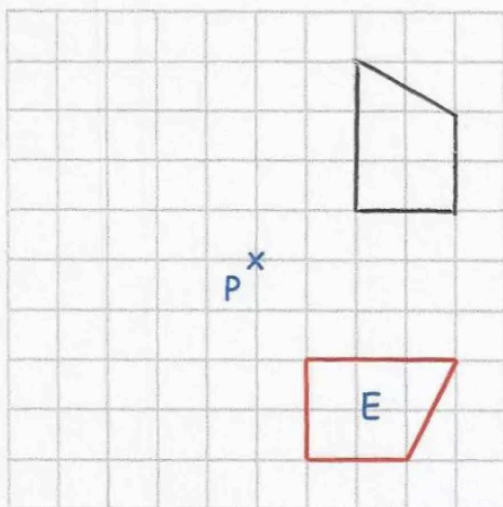
rotate  $90^\circ$  clockwise about P

Q1(d)



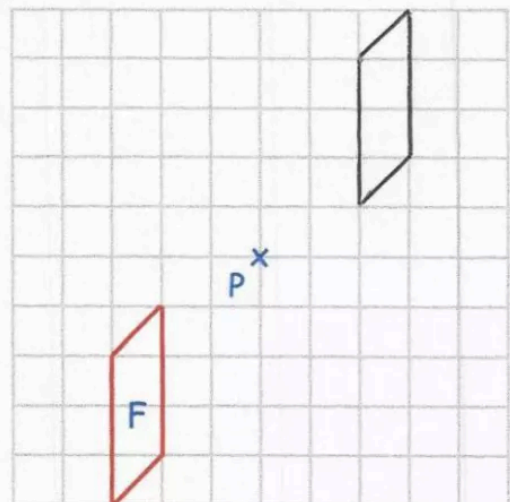
rotate  $180^\circ$  about P

Q1(e)



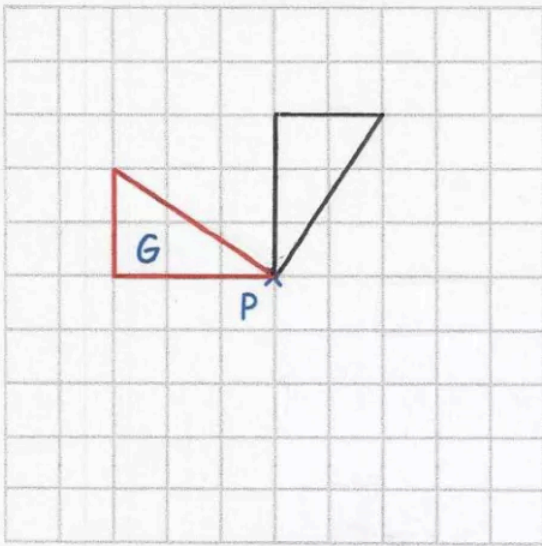
rotate  $90^\circ$  anticlockwise about P

Q1(f)



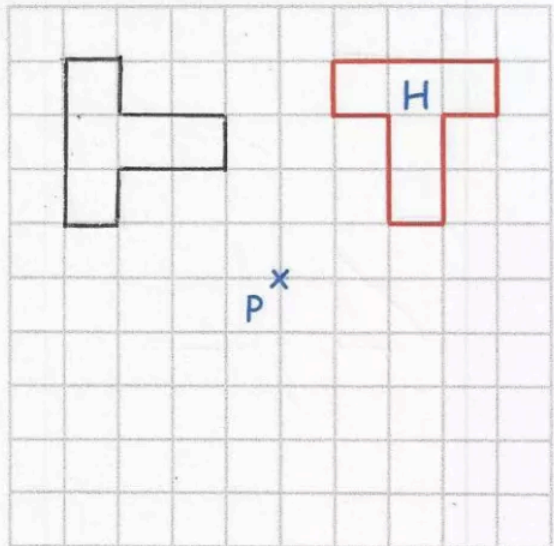
rotate  $180^\circ$  about P

Q1(g)



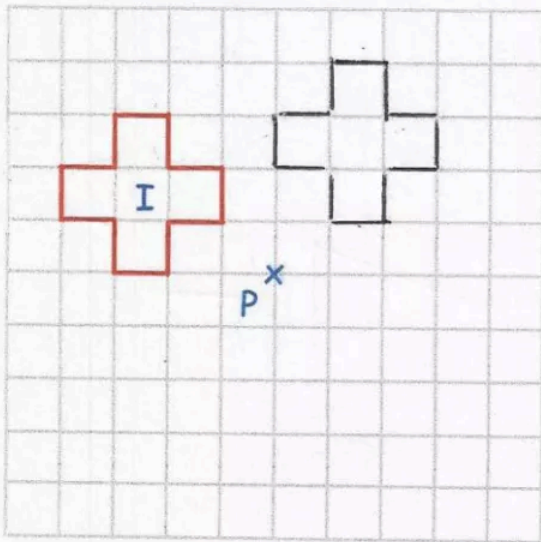
rotate  $90^\circ$  clockwise about P

Q1(h)



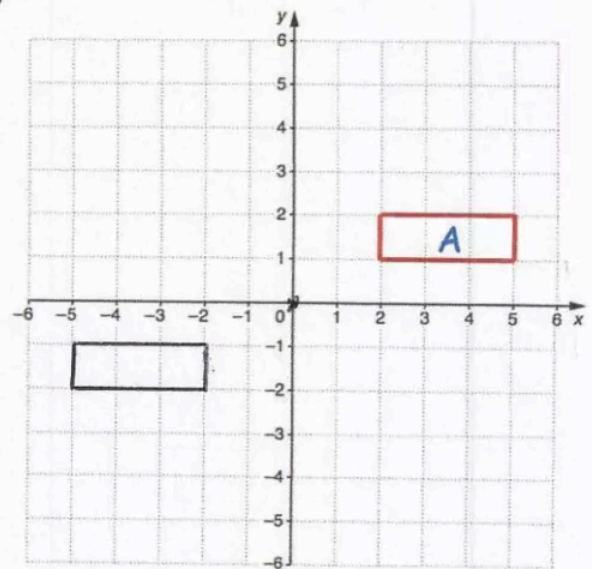
rotate  $270^\circ$  clockwise about P

Q1(i)



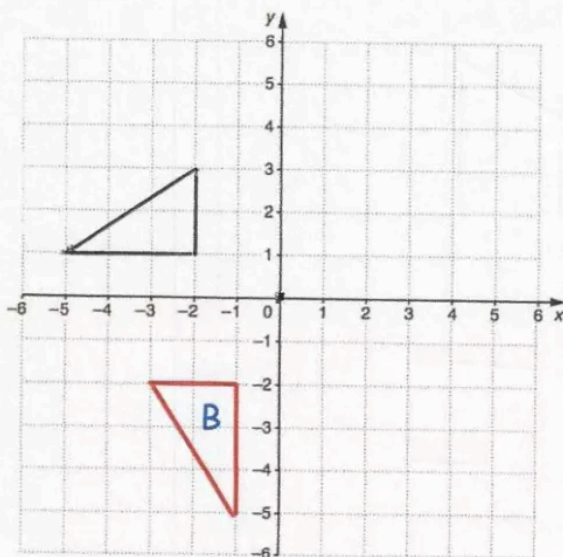
rotate  $270^\circ$  anticlockwise about P

Q2(a)



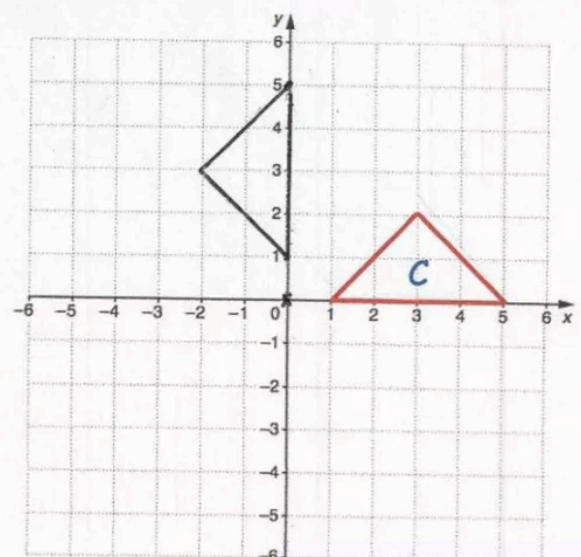
rotate  $180^\circ$  about (0, 0)

Q2(b)



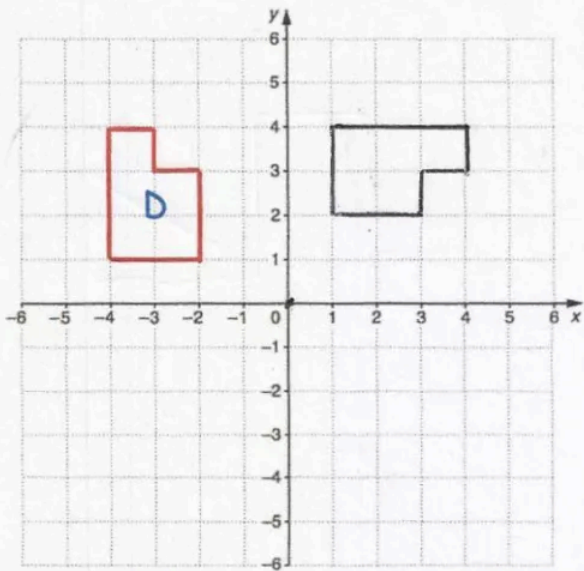
rotate  $90^\circ$  clockwise about (0, 0)

Q2(c)



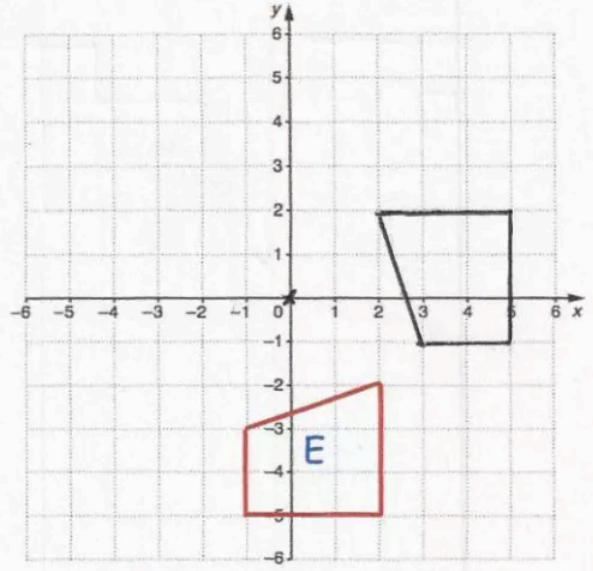
rotate  $90^\circ$  anticlockwise about (0, 0)

Q2(d)



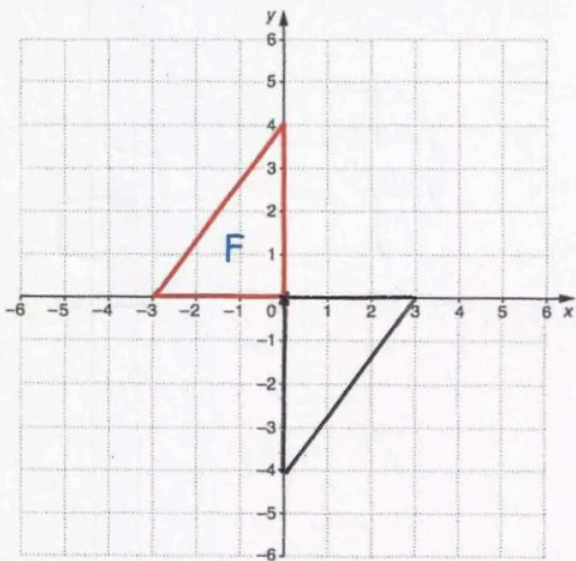
rotate  $90^\circ$  clockwise about  $(0, 0)$

Q2(e)



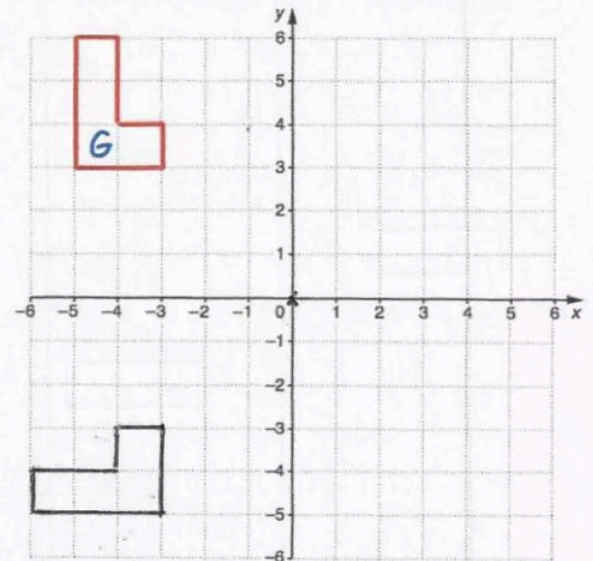
rotate  $90^\circ$  anticlockwise about  $(0, 0)$

Q2(f)



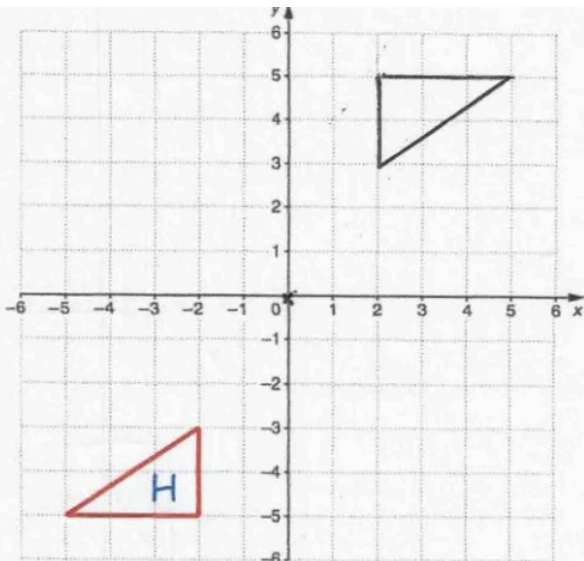
rotate  $180^\circ$  about  $(0, 0)$

Q2(g)



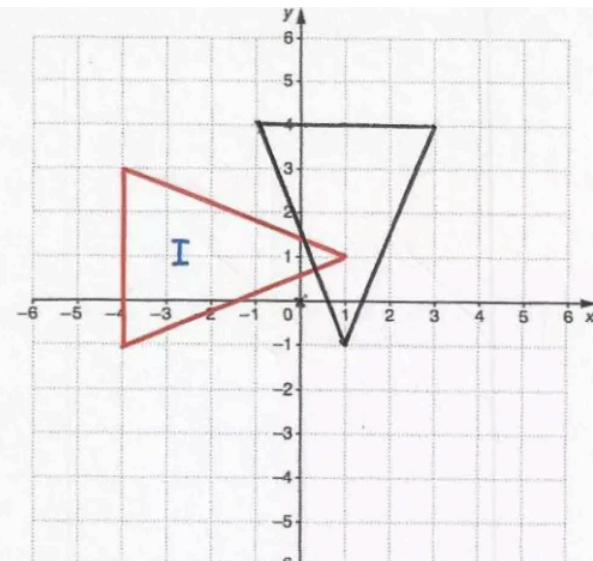
rotate  $90^\circ$  anticlockwise about  $(0, 0)$

Q2(h)



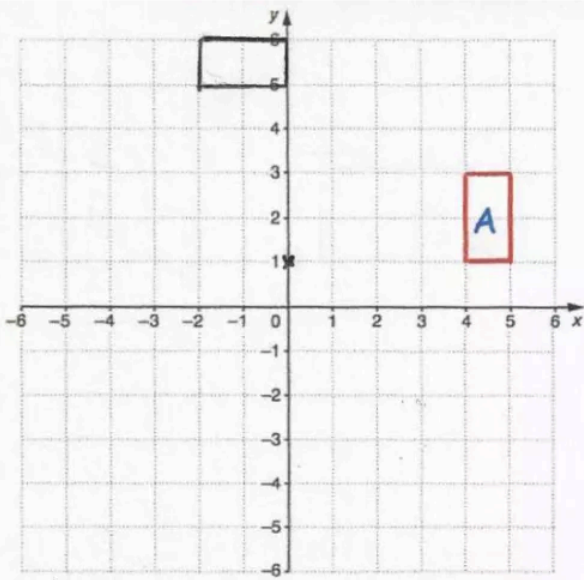
rotate  $180^\circ$  about  $(0, 0)$

Q2(i)



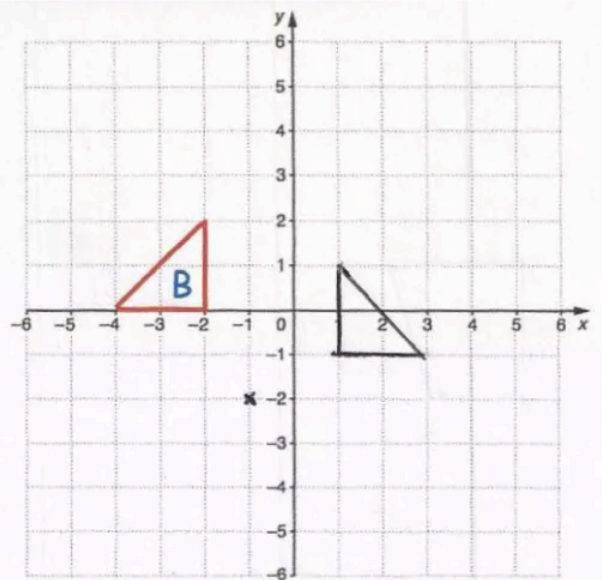
rotate  $90^\circ$  clockwise about  $(0, 0)$

Q3(a)



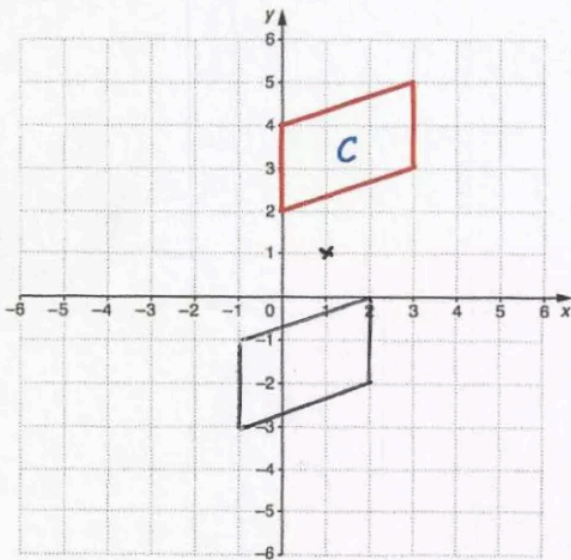
rotate  $90^\circ$  anticlockwise about  $(0, 1)$

Q3(b)



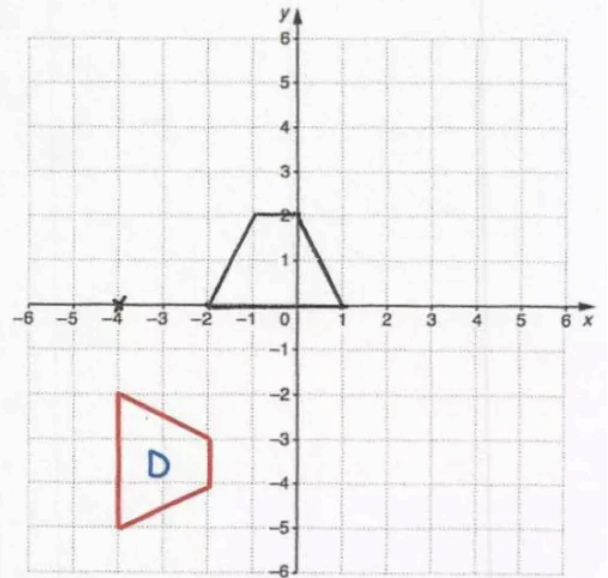
rotate  $90^\circ$  clockwise about  $(-1, -2)$

Q3(c)



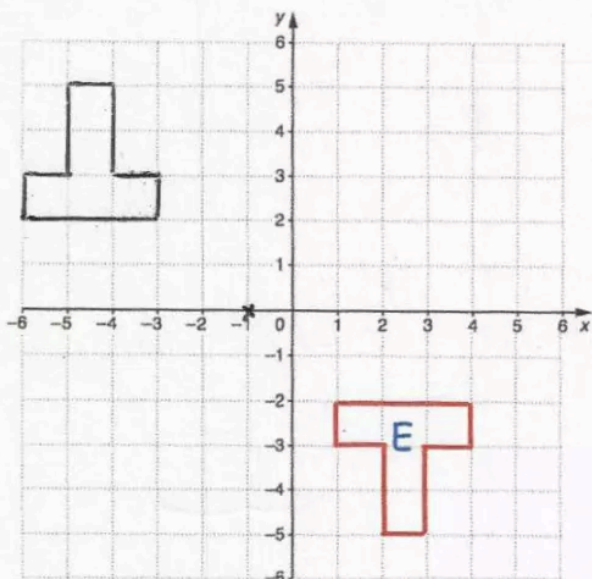
rotate  $180^\circ$  about  $(1, 1)$

Q3(d)



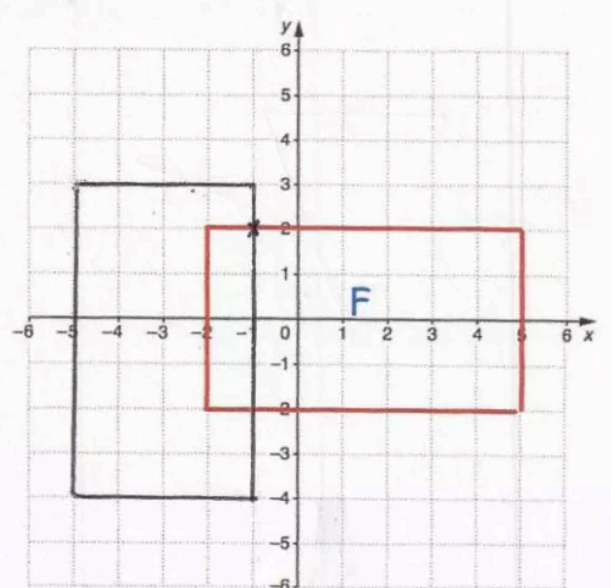
rotate  $90^\circ$  anticlockwise about  $(-4, 0)$

Q3(e)



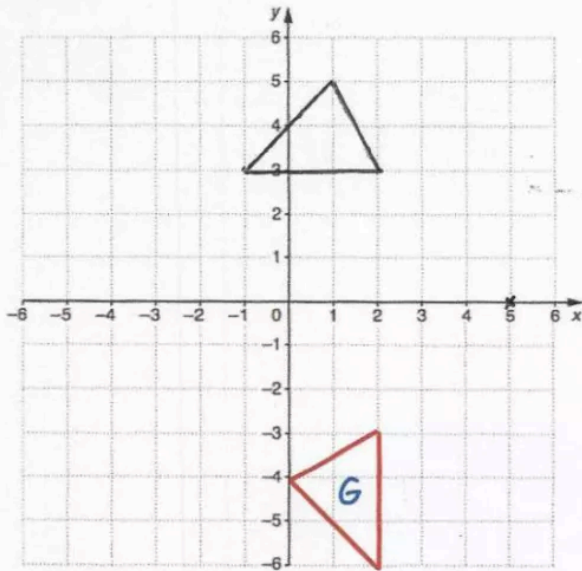
rotate  $180^\circ$  about  $(-1, 0)$

Q3(f)



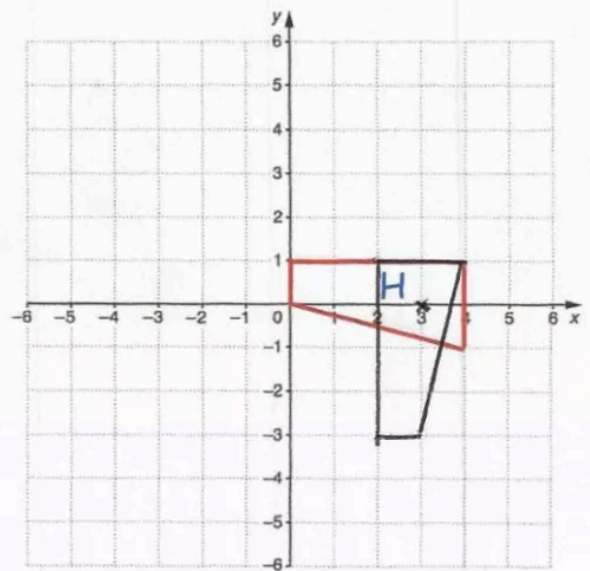
rotate  $90^\circ$  clockwise about  $(-1, 2)$

Q3(g)



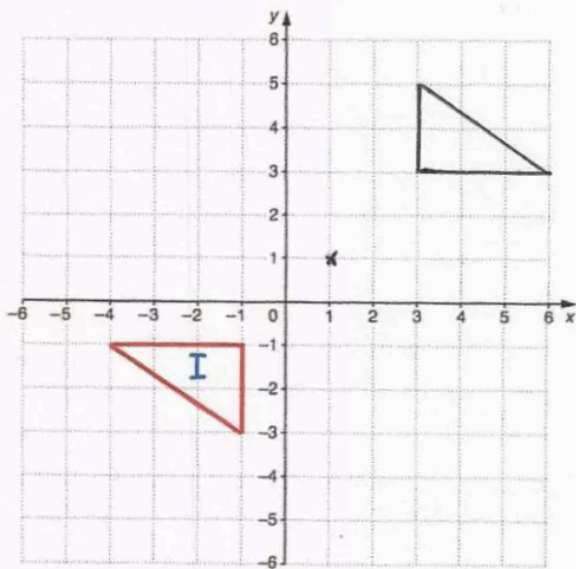
rotate  $90^\circ$  clockwise about  $(5, 0)$

Q3(h)



rotate  $90^\circ$  anticlockwise about  $(3, 0)$

Q3(i)



rotate  $180^\circ$  about  $(1, 1)$

Question 4:

- (a) Rotated 90 degrees clockwise about centre  $(0, 0)$
- (b) Rotated 90 degrees anticlockwise about centre  $(0, 0)$
- (c) Rotated 180 degrees about centre  $(0, 0)$
- (d) Rotated 90 degrees clockwise about centre  $(1, 1)$
- (e) Rotated 180 degrees about centre  $(2, 0)$
- (f) Rotated 90 degrees anticlockwise about centre  $(1, 3)$