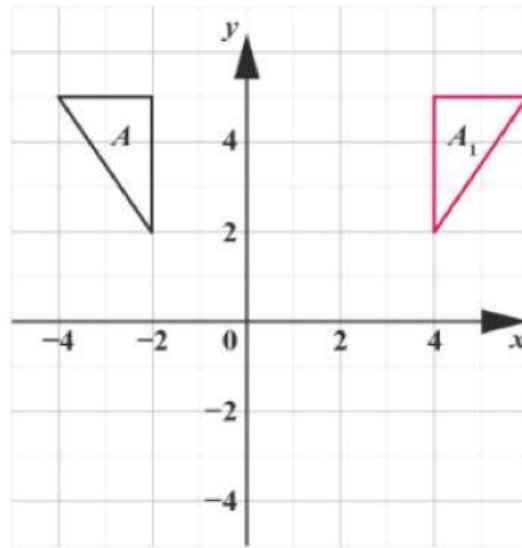


1.

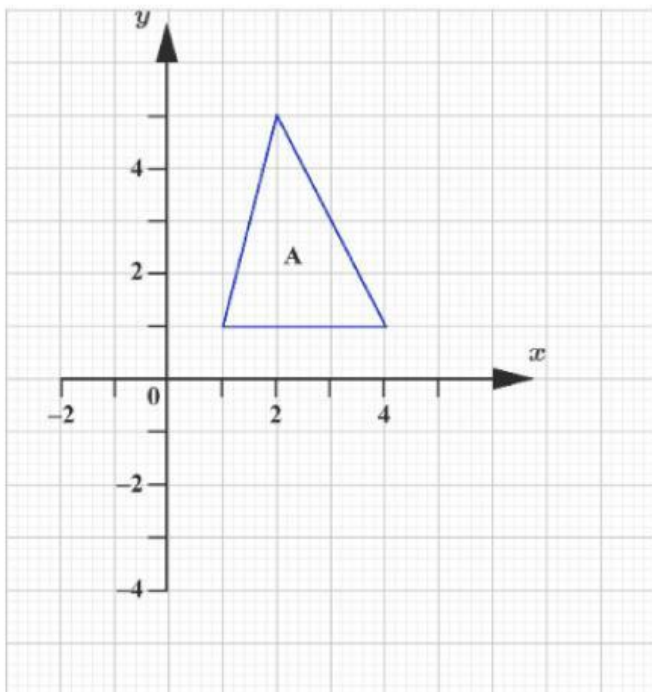
Shape A has been reflected to image  $A_1$ .



What is the equation of the line that acts as a mirror?

2.

Shape A is reflected in the line  $x = 4$ .



The coordinates of the new image,  $A_1$ , are:

1 (1, 4), (4, 4), (2, 8)

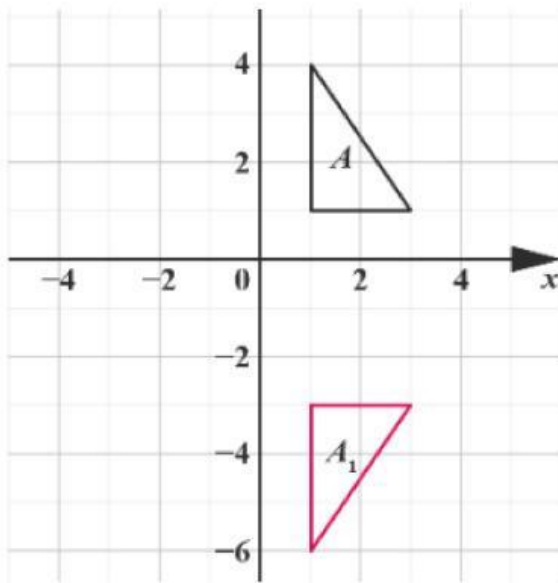
2 (2, 3), (1, 7), (4, 7)

3 (4, 1), (7, 1), (5, 5)

4 (4, 1), (7, 1), (6, 5)

3.

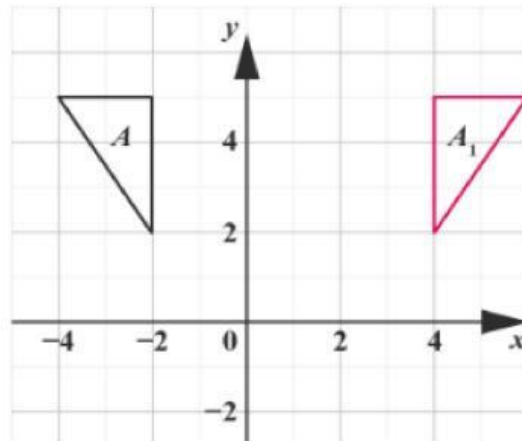
Shape A has been reflected to shape  $A_1$ .



What is the equation of the line that acts as the mirror?

4.

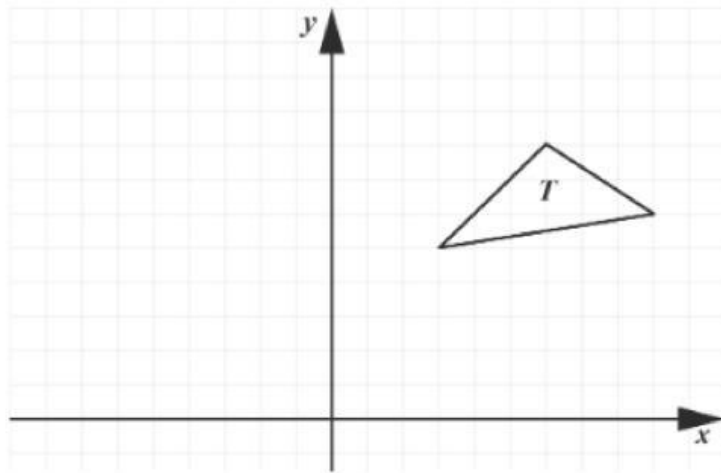
Shape A has been reflected to image  $A_1$ .



What is the equation of the line that acts as a mirror?

5.

Triangle  $T$  has vertices with coordinates  $(3, 5)$ ,  $(9, 6)$  and  $(6, 8)$ .



The triangle is reflected in the line  $y = 4$  to give triangle  $T'$ .

Triangle  $T'$  is reflected in the line  $x = 1$  to form triangle  $T''$ .

What are the coordinates of  $T''$ ?

6.

Triangle  $T$  has one vertex at the point with coordinates  $(7, -5)$ .

The triangle is reflected in the  $x$ -axis to form triangle  $T'$ .

Triangle  $T'$  is reflected in the line  $y = x$  to form triangle  $T''$ .

What are the new coordinates of the vertex after the combined transformation?