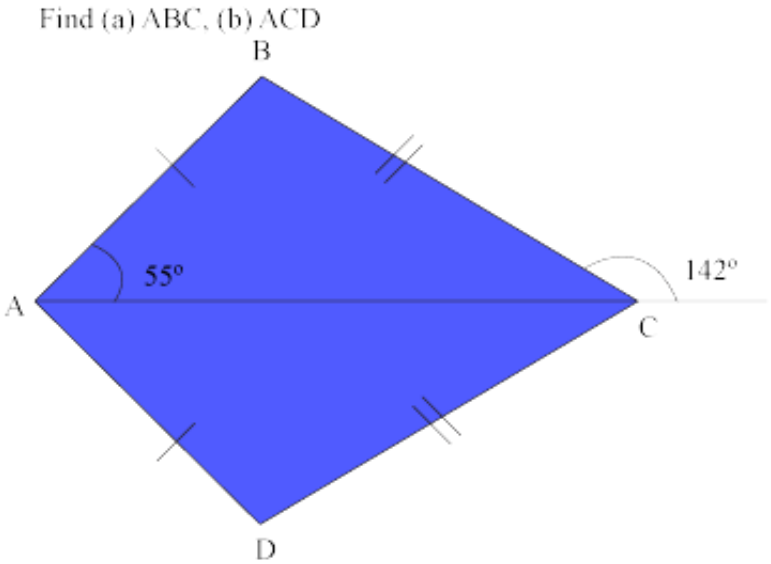
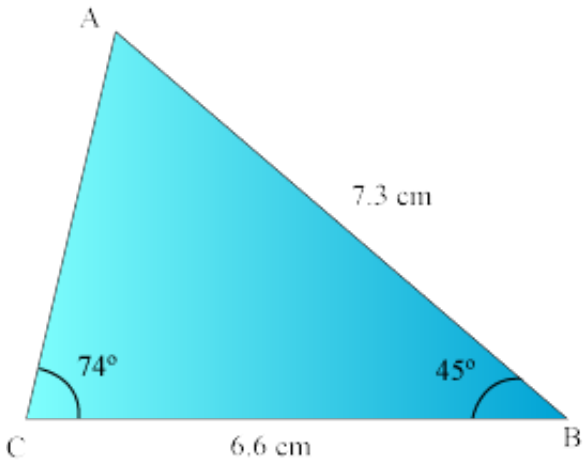
Eighth Grade - Geometry

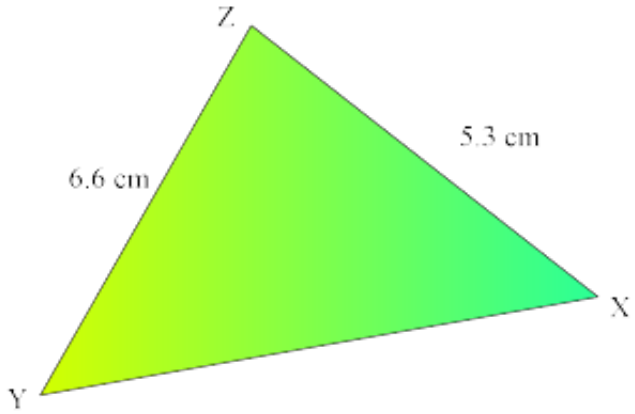
1) Given that the two triangles ABC and ADC below are congruent. Find



- a) 81°, b) 32°
- a) 82°, b) 35°
- a) 87°, b) 38°
- a) 84°, b) 37

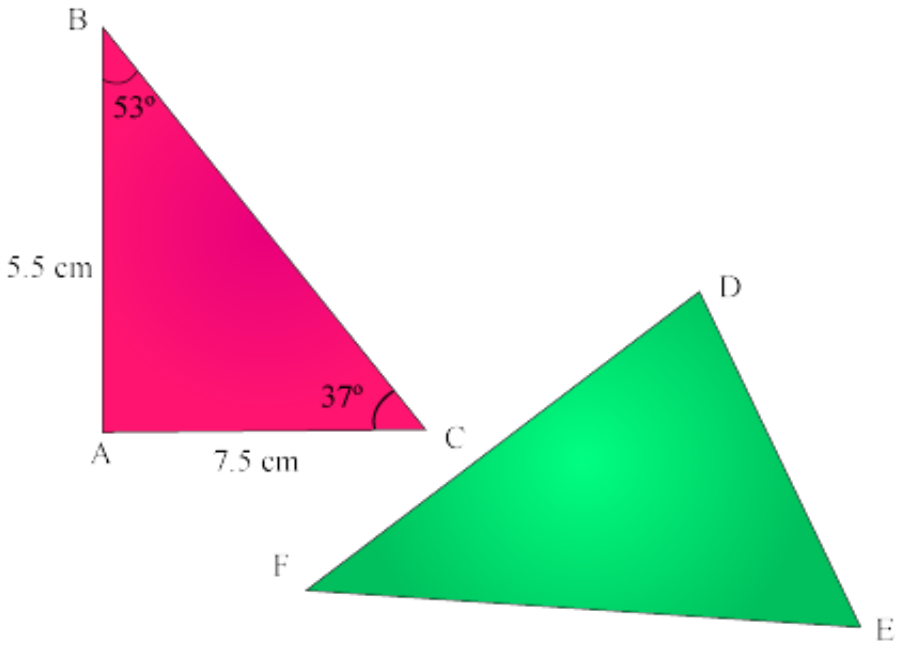
2) Given that ?ABC is congruent to ?XYZ as shown below (a) find the length of side XY, (b) find ?YXZ.





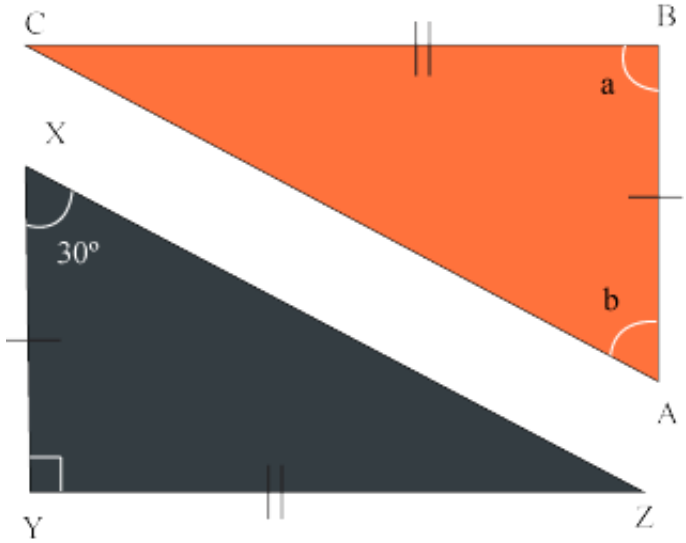
- a) 8.3 cm, b) 81°
- a) 7.3 cm, b) 61°
- a) 7.4 cm, b) 51°
- a) 6.4 cm, b) 71°

3) Given below ?ABC is congruent to ?DEF, find (a) the length of side DF, (b) ?EDF



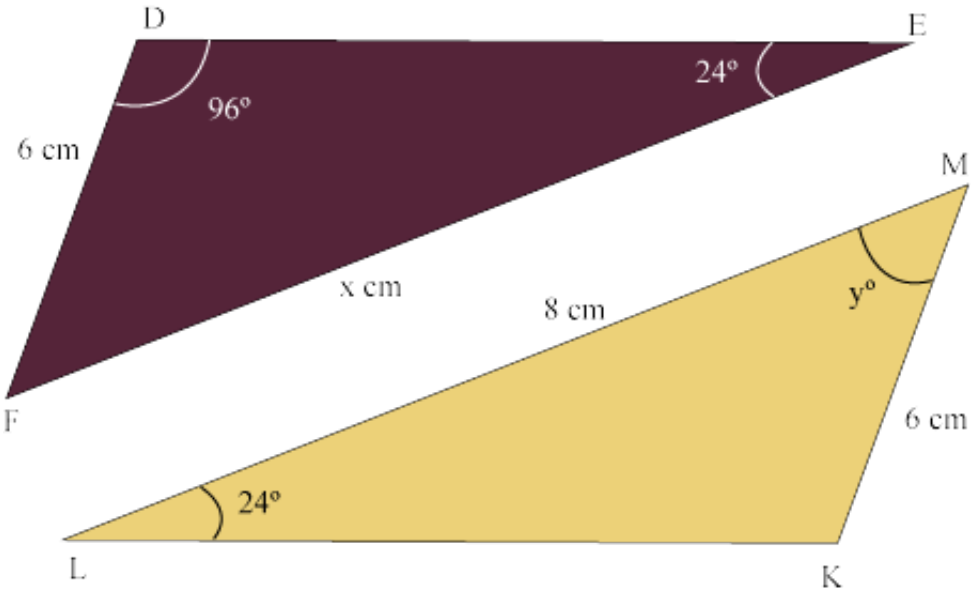
- a) 6.5 cm, b)60°
- a) 5.3 cm, b)70°
- a) 7.5 cm, b)90°
- a) 8.2 cm, b)80°

4) ?XYZ is congruent to ?ABC. Find ?a and?b



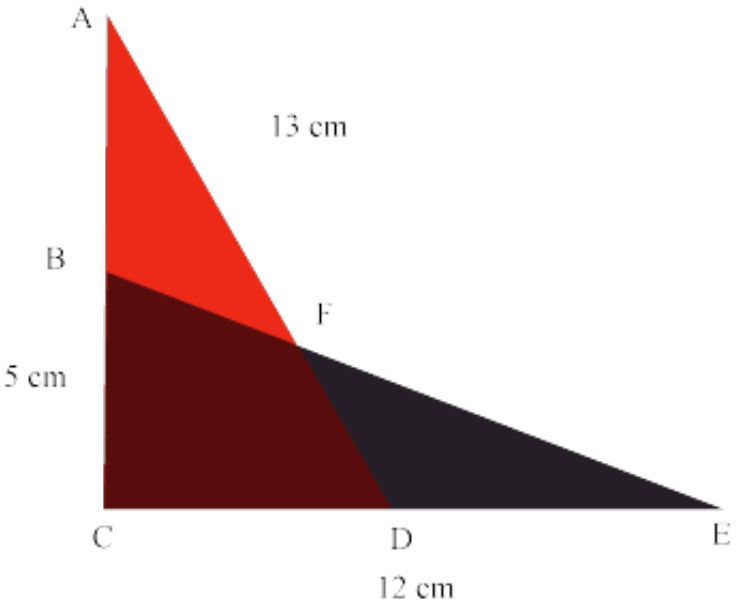
- ?a = 50° & ?b = 40
- ?a = 90° & ?b = 30°
- ?a = 60° & ?b = 20°
- ?a = 70° & ?b = 10°

5) Given that ?DEF and ?KLM in the diagram below are congruent, find the values ofx and y.



- x = 7cm, y = 70°
- x = 6cm, y = 50°
- x = 8cm, y = 60°
- x = 7cm, y = 10°

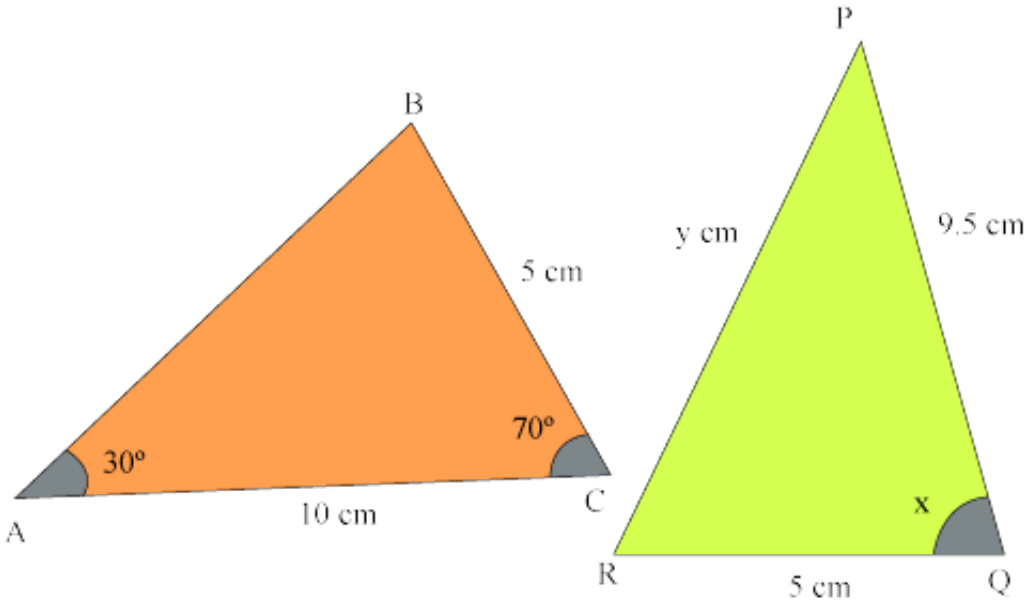
6) ?ACD is congruent to ?ECB.CE = 12 cm, AD = 13 cm and BC = 5 cm. Find the length of AB



- 3 cm

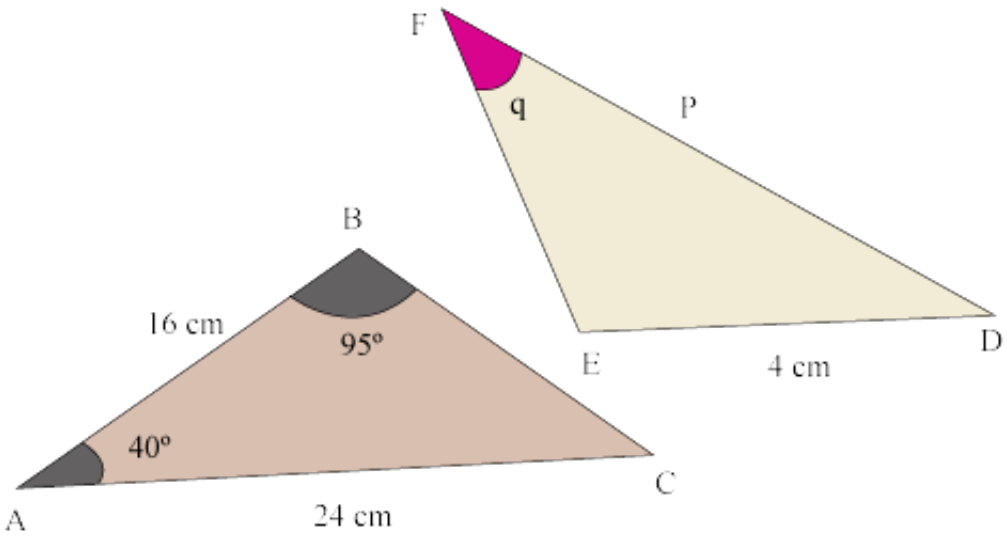
- 1 cm
- 8 cm
- 7 cm

7) ?ABC is congruent to ?PQR (a) What is the value of x? (b) What is the length of y?



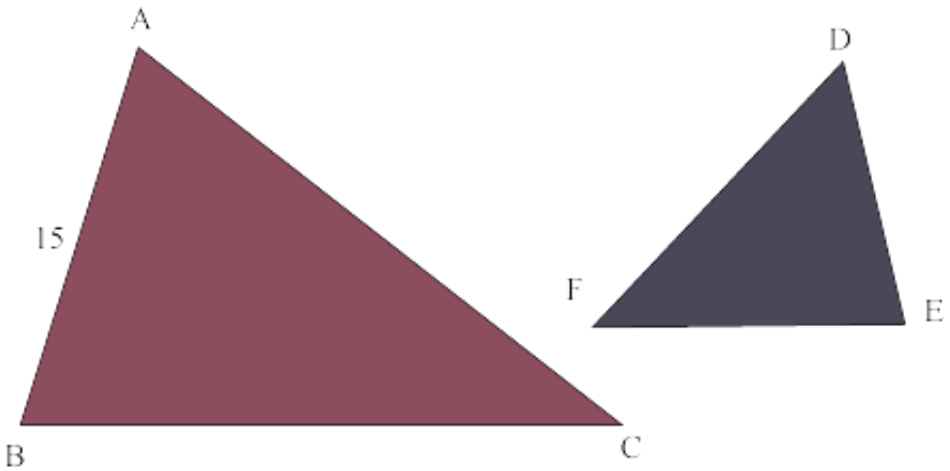
- a) 80°, b) 10 cm
- a) 10°, b) 60 cm
- a) 70°, b) 20 cm
- a) 60°, b) 80 cm

8) ?ABC is similar to ?DEF. Find, (a) The angle q. (b) The length of p.



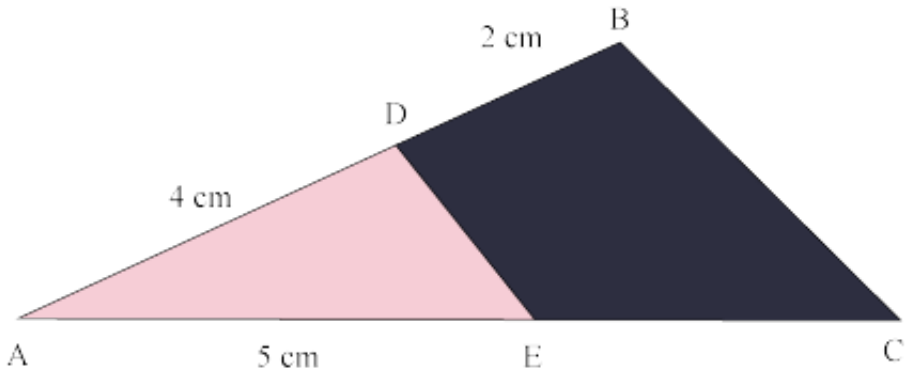
- a) 47°, b) 5 cm
- a) 41°, b) 3 cm
- a) 45°, b) 6 cm
- a) 46°, b) 2 cm

9) ?ABC is similar to ?DEF. Given that AB = 15 cm and DE = 5 cm, find AC/DF in its simplest form



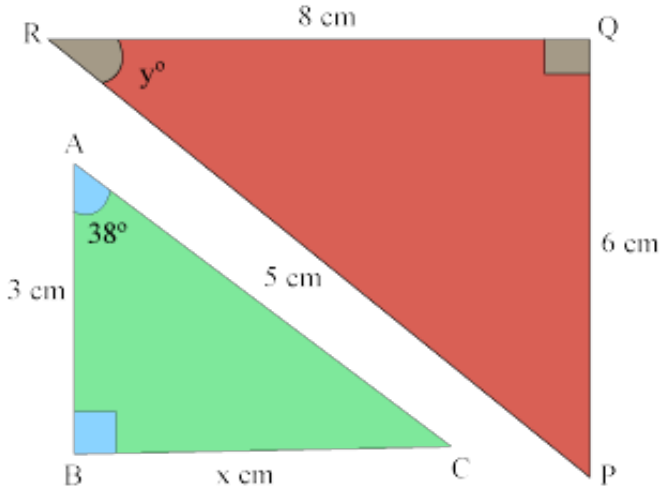
- 7
- 2
- 3
- 8

10) Given that ?ABC and ?ADE are similar triangles, find the length of EC



- 4.5 cm
- 6.5 cm
- 2.5 cm
- 5.5 cm

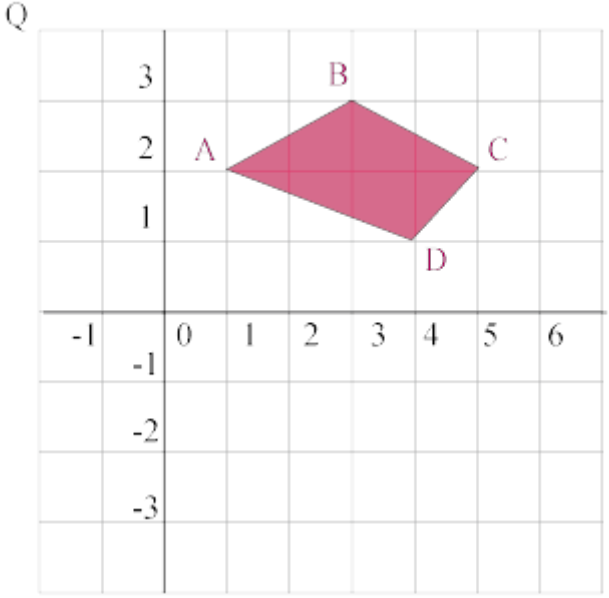
11) Given ?ABC is similar to ?PQR. Find the values of x and y.



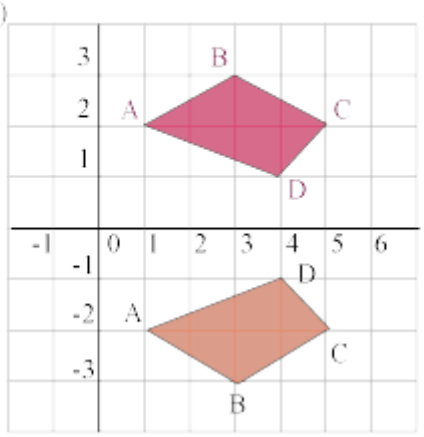
- x = 8cm, y = 12°
- x = 5cm, y = 42°
- x = 6cm, y = 32°
- x = 4cm, y = 52°

12) Graph the image of the figure using the transformation given: Reflection about x-axis:

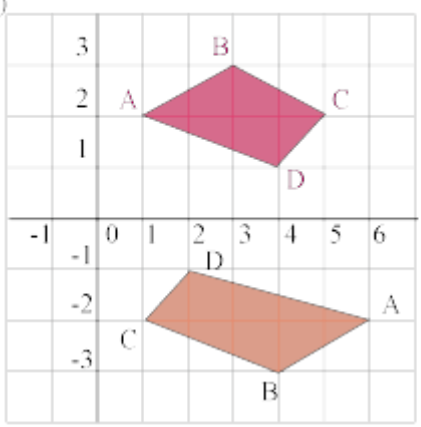
Q



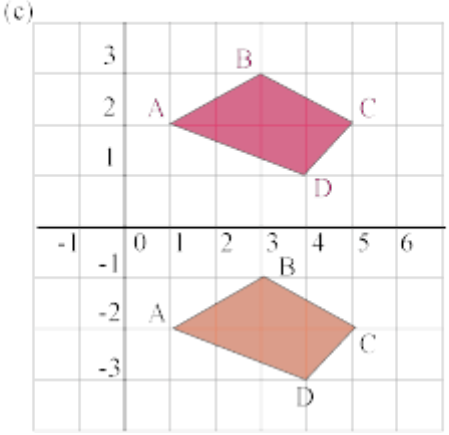
(a)



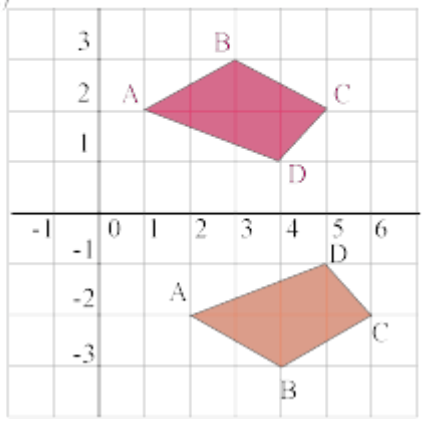
(b)



(c)



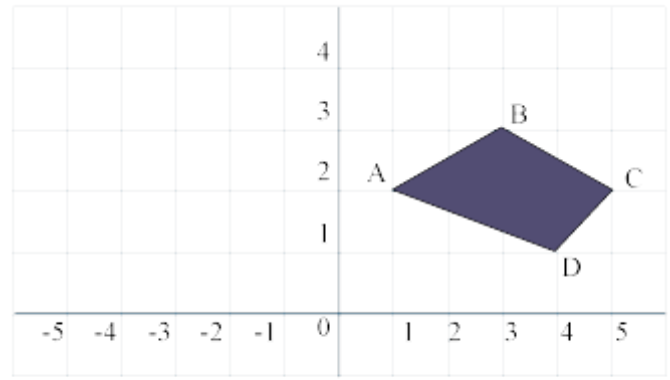
(d)



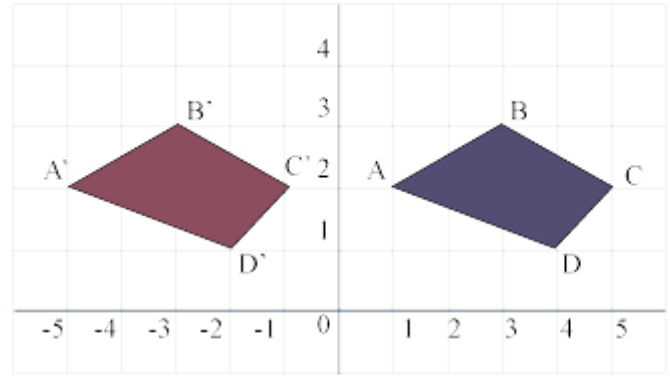
- b
- a
- c
- d

13) Graph the image of the figure using the transformation given: Reflection about y-axis:

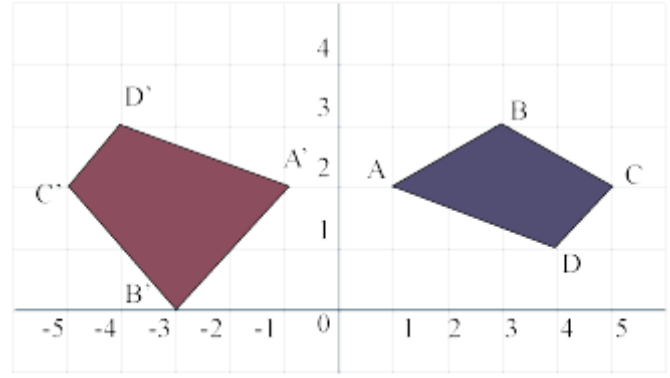
Q)



a)



b)



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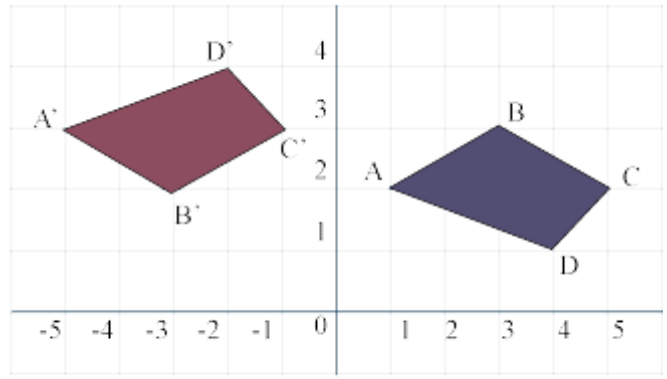
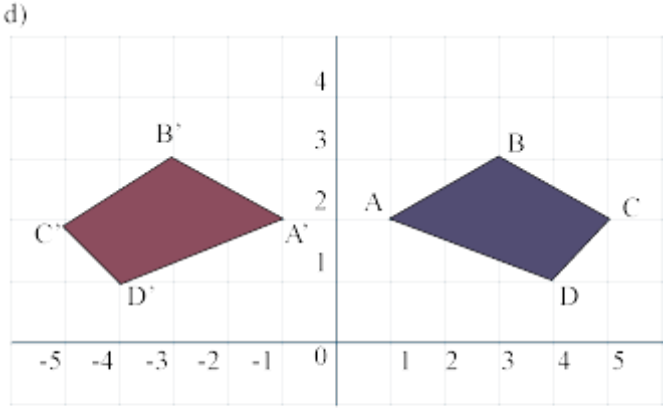


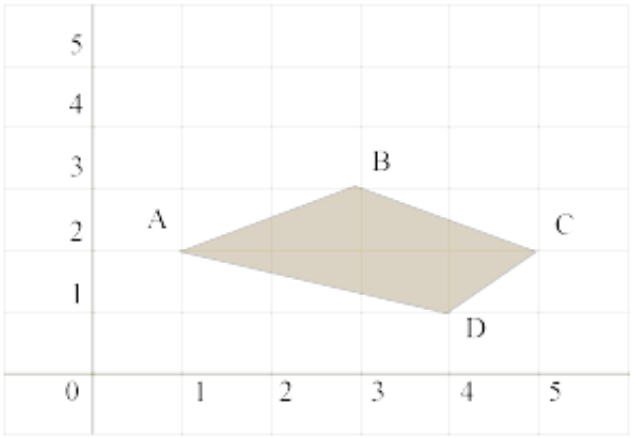
d)



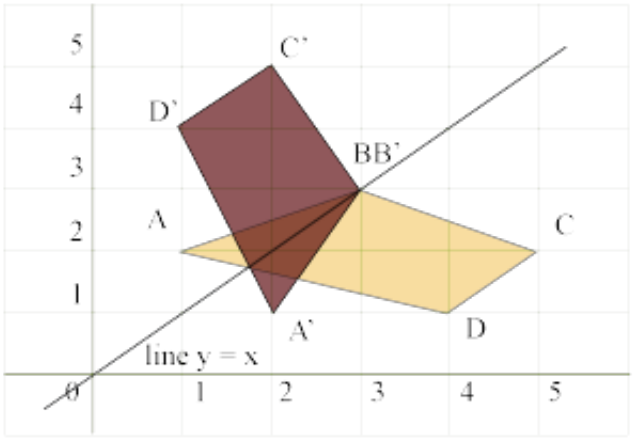
- d
- b
- a
- c

14) Graph the image of the figure using the transformation given: Reflection about y = x

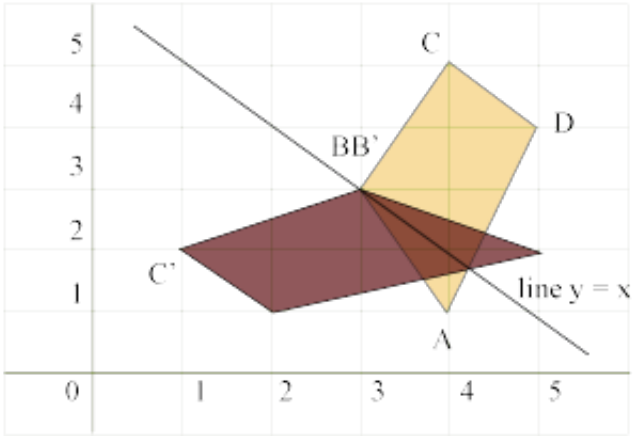
Q.



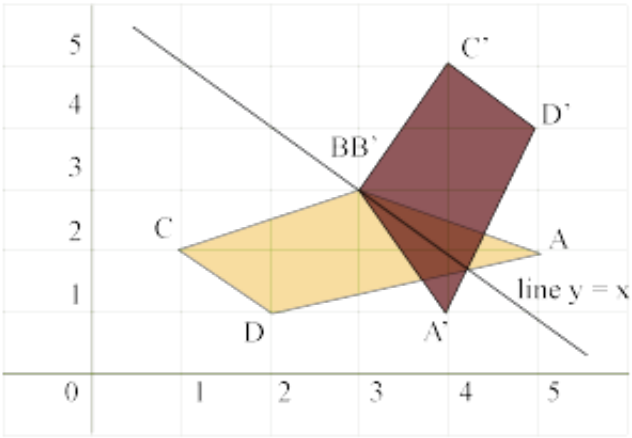
a.



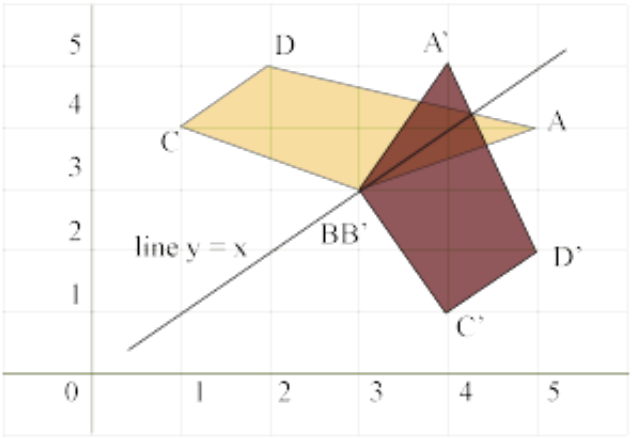
b.



c.



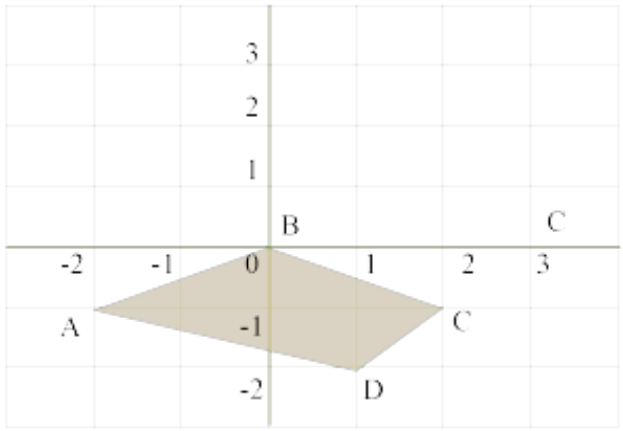
d.



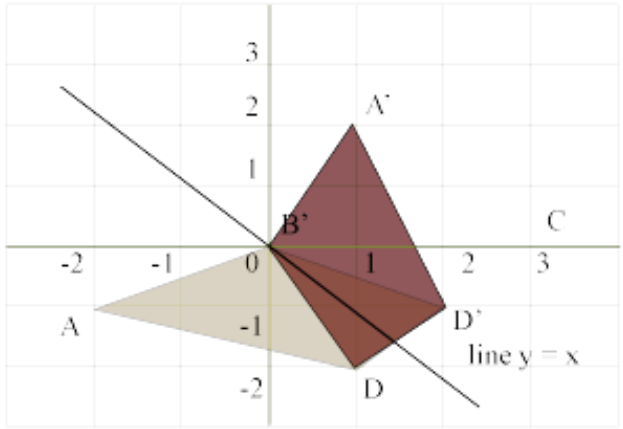
- c
- d
- b
- a

15) Graph the image of the figure using the transformation given: Reflection about y = -x

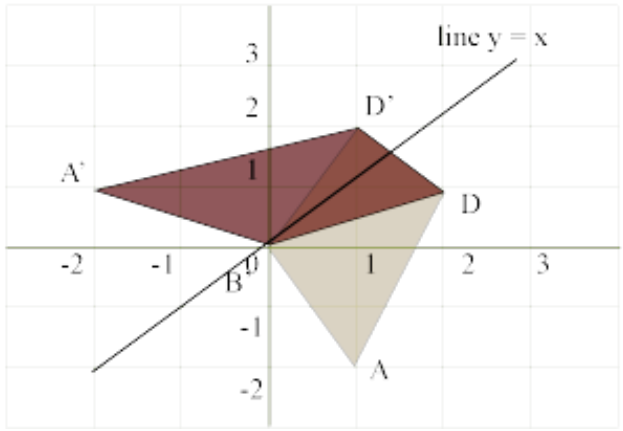
Q.



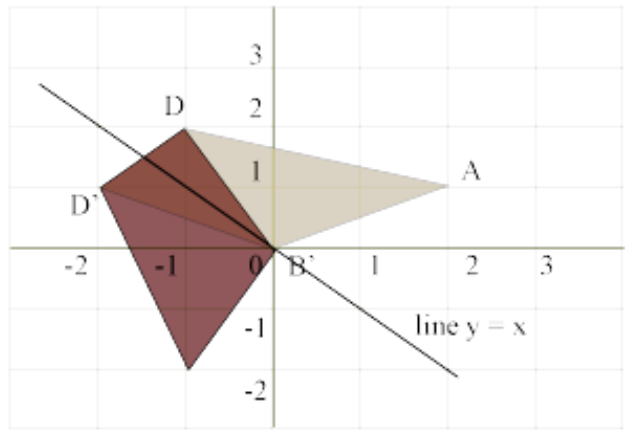
a.



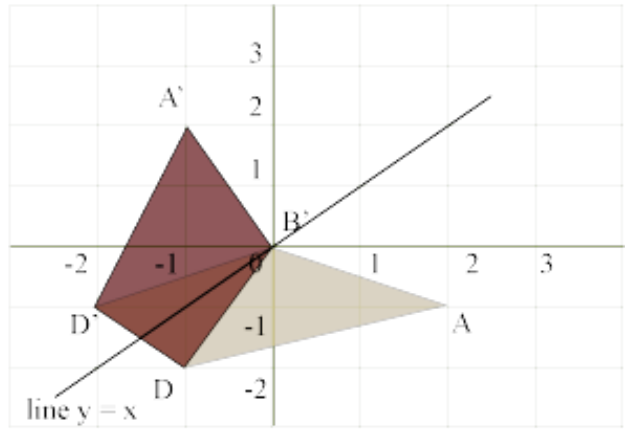
b.



c.



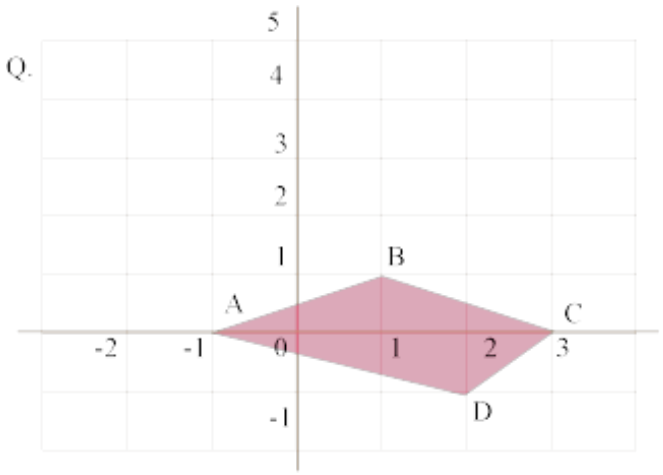
d.



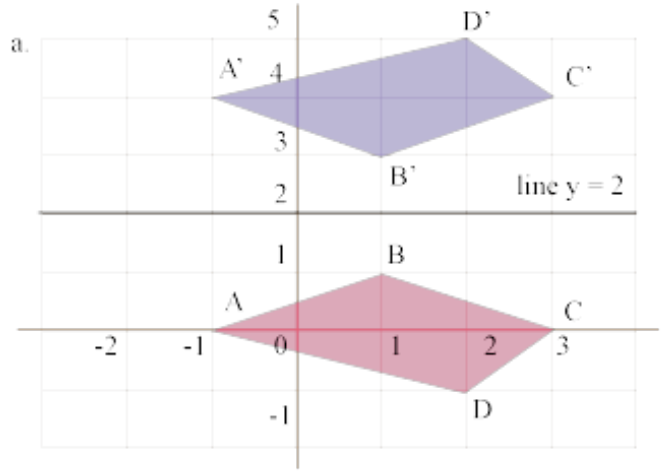
- a
- c
- d
- b

16) Graph the image of the figure using the transformation given: Reflection about y = 2

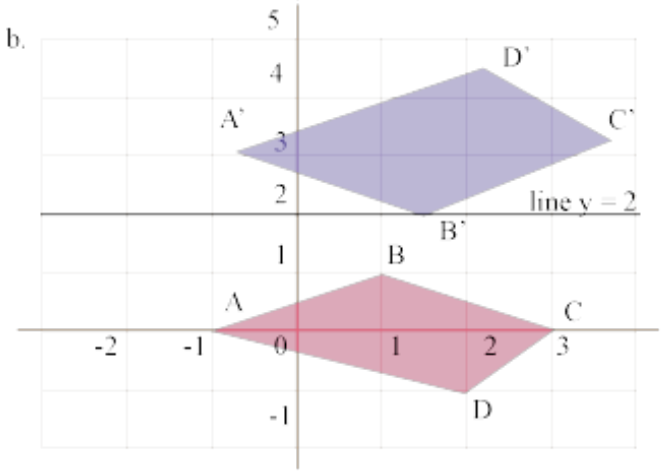
Q.



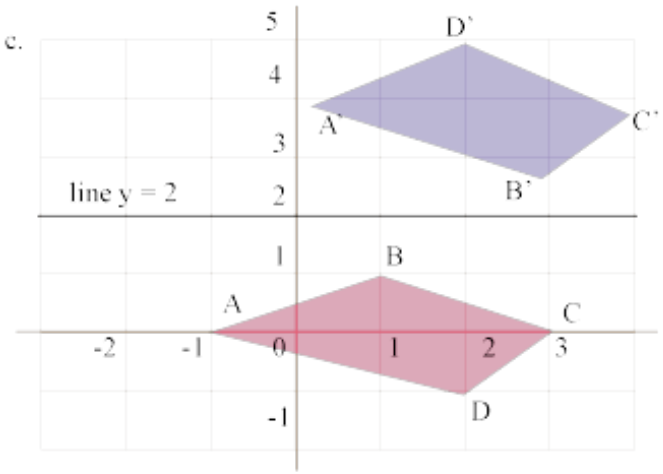
a.



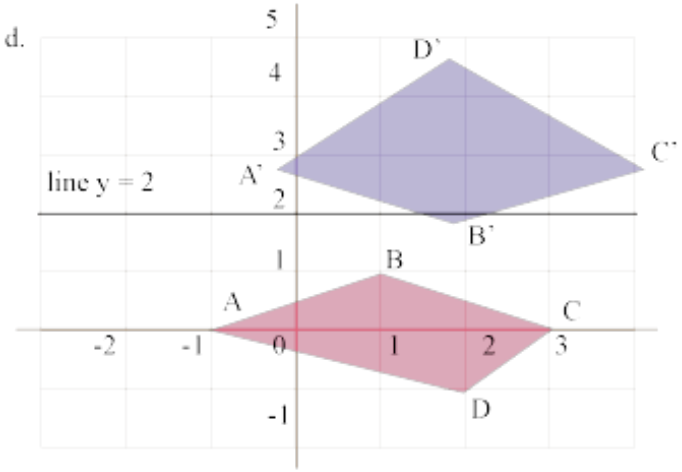
b.



c.



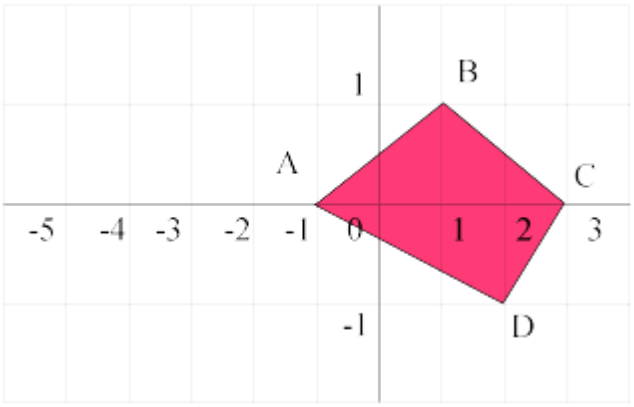
d.



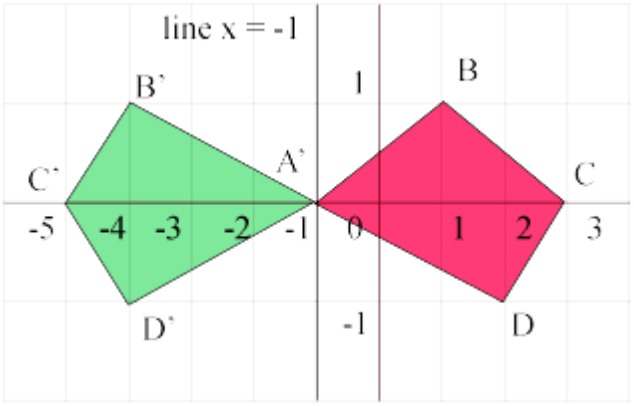
- d
- c
- b
- a

17) Graph the image of the figure using the transformation given: Reflection about x= -1

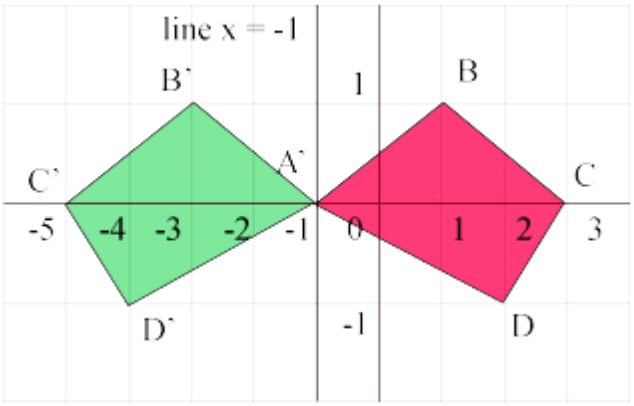
Q.



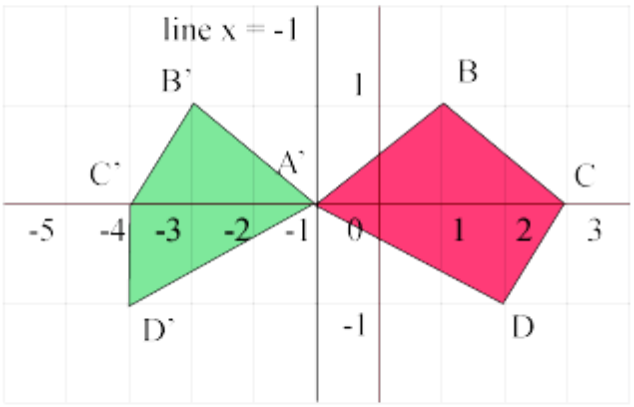
a.



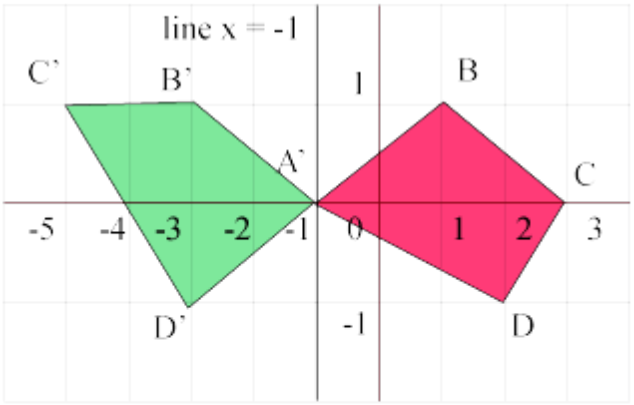
b.



c.

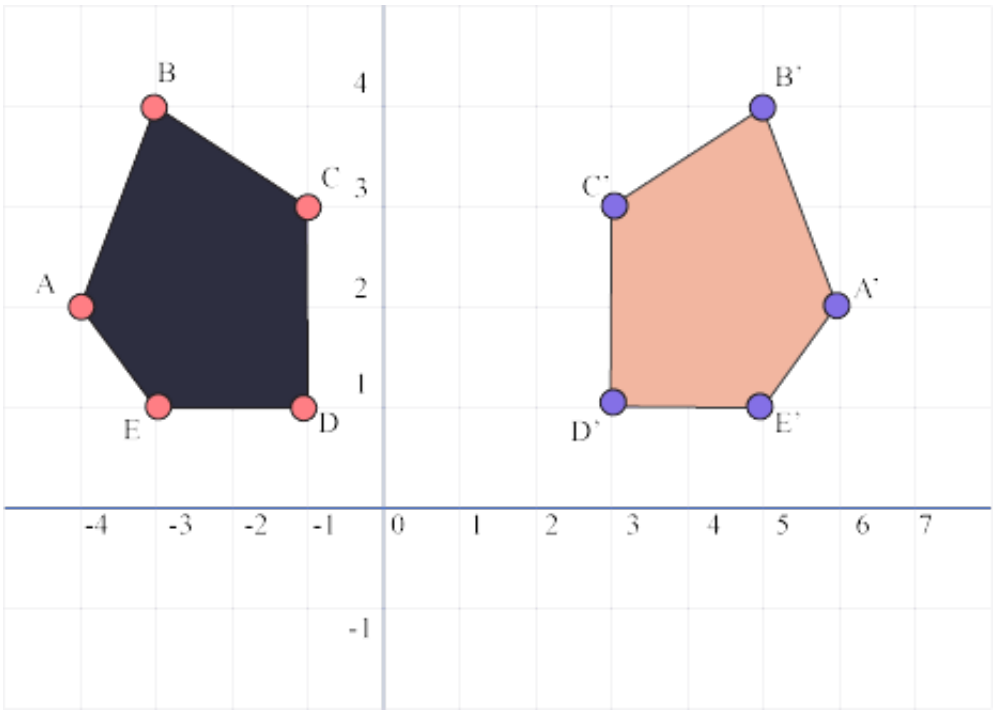


d.



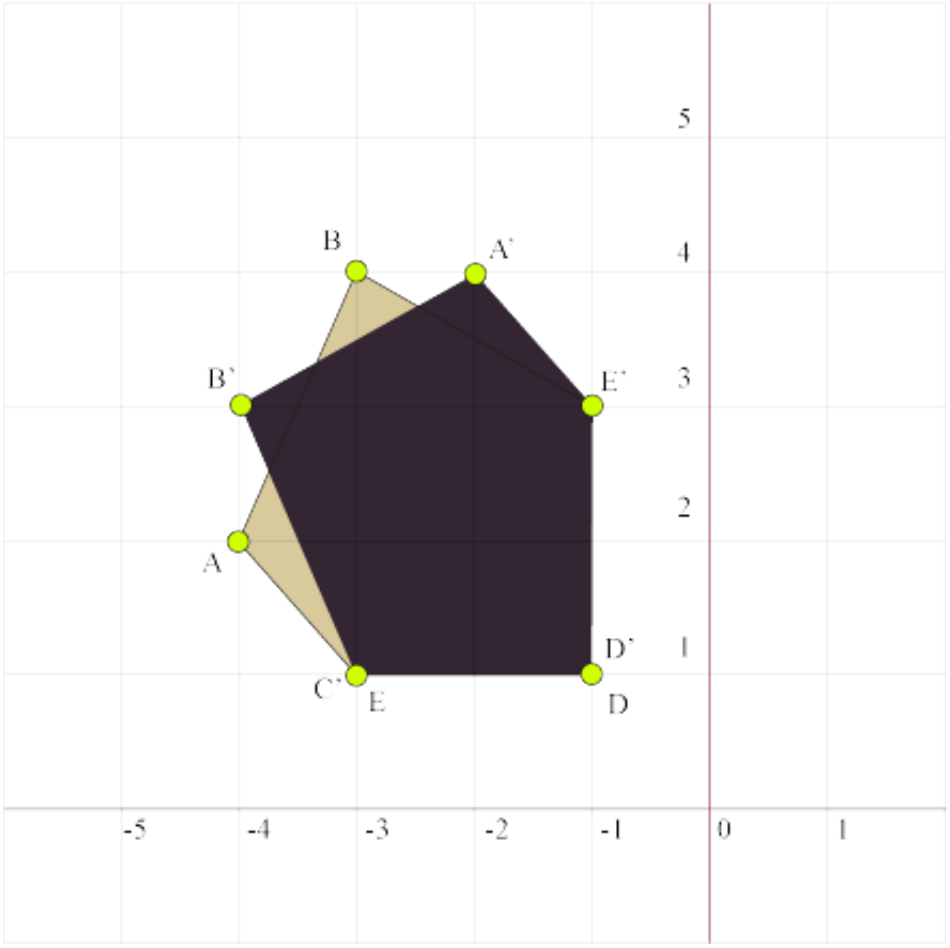
- a
- c
- b
- d

18) Write the equation of the line of reflection. Black is the original, brown is the image



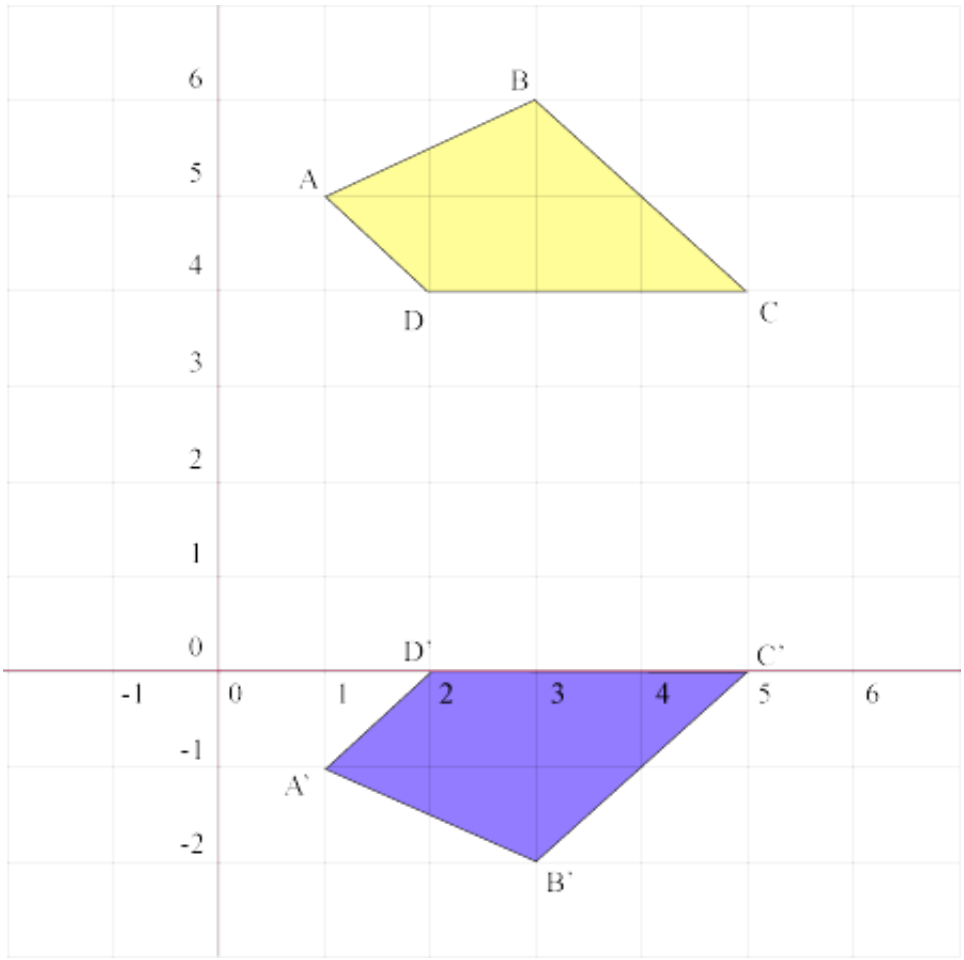
- x = 2
- x = 4
- x = 3
- x = 1

19) Write the equation of the line of reflection. Sandal is the original, Black is the image.



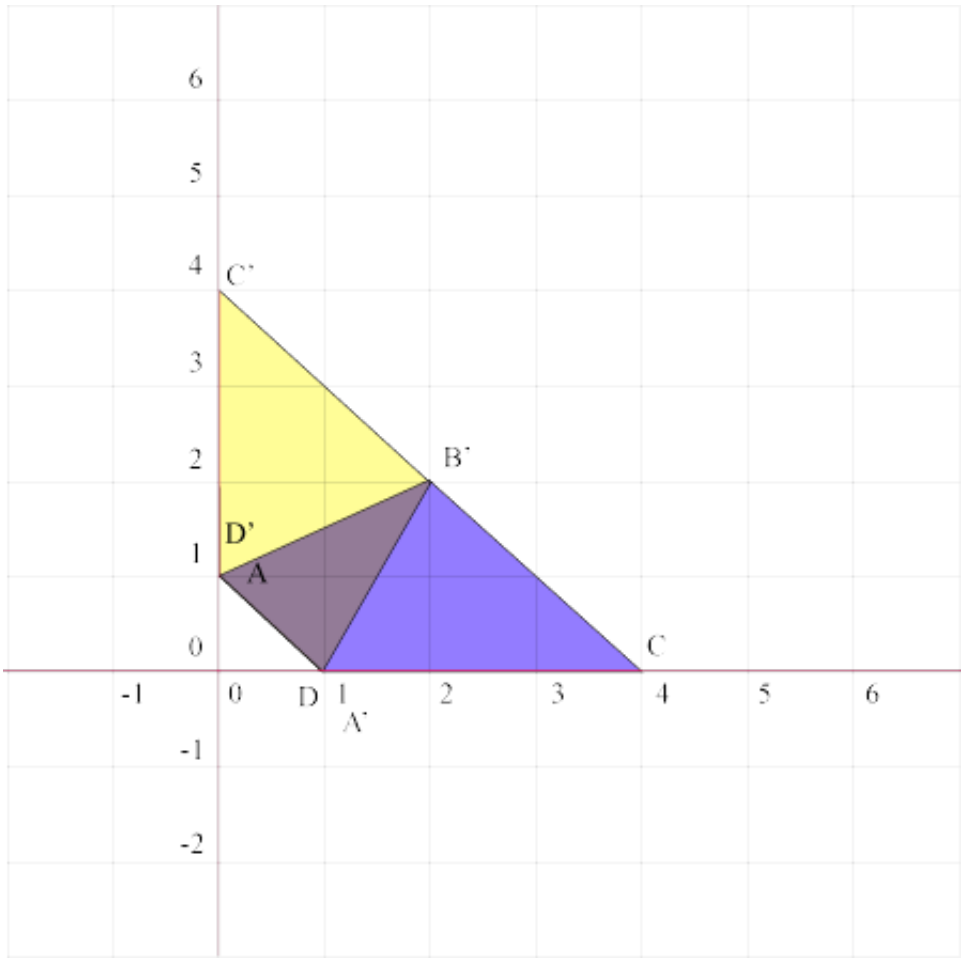
- y = x
- y = -y
- y = -x
- y = y

20) Write the equation of the line of reflection. Yellow is the original, purple is the image.



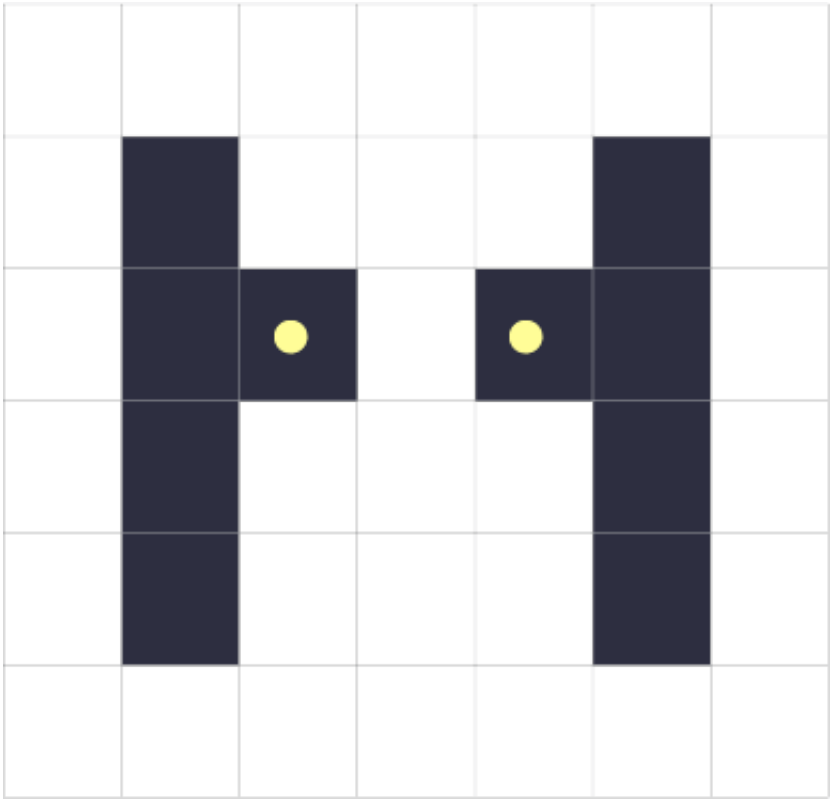
- y = 2
- y = 5
- y = 3
- y = 4

21) Write the equation of the line of reflection. Purple is the original, yellow is the image



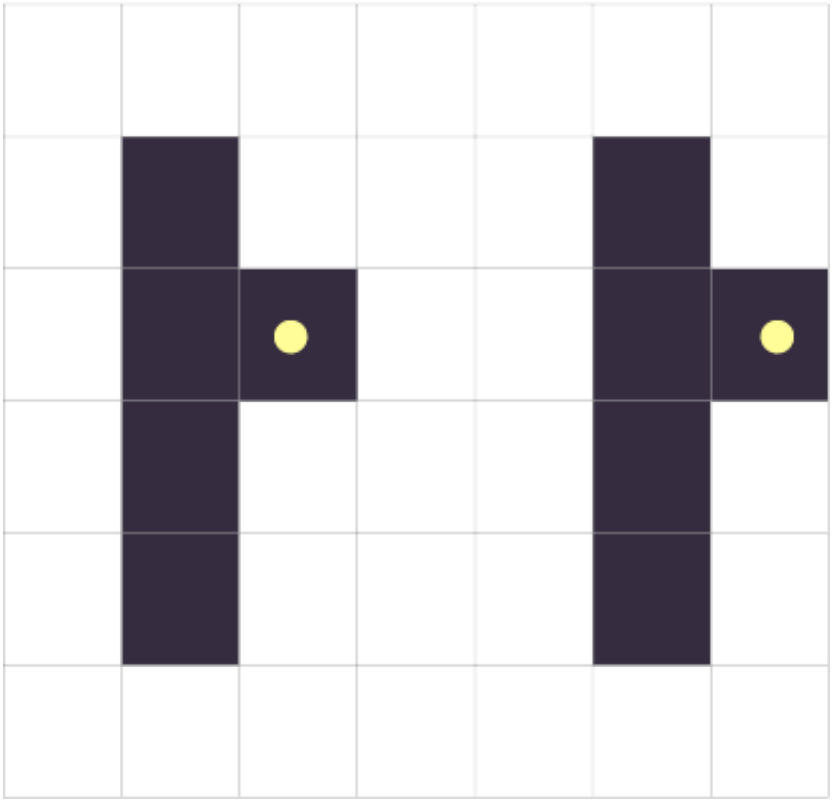
- y =-x
- y = -y
- y = x
- y = y

22) How the following figures are moved? Is it translation or Reflection or Rotation or Dilation?



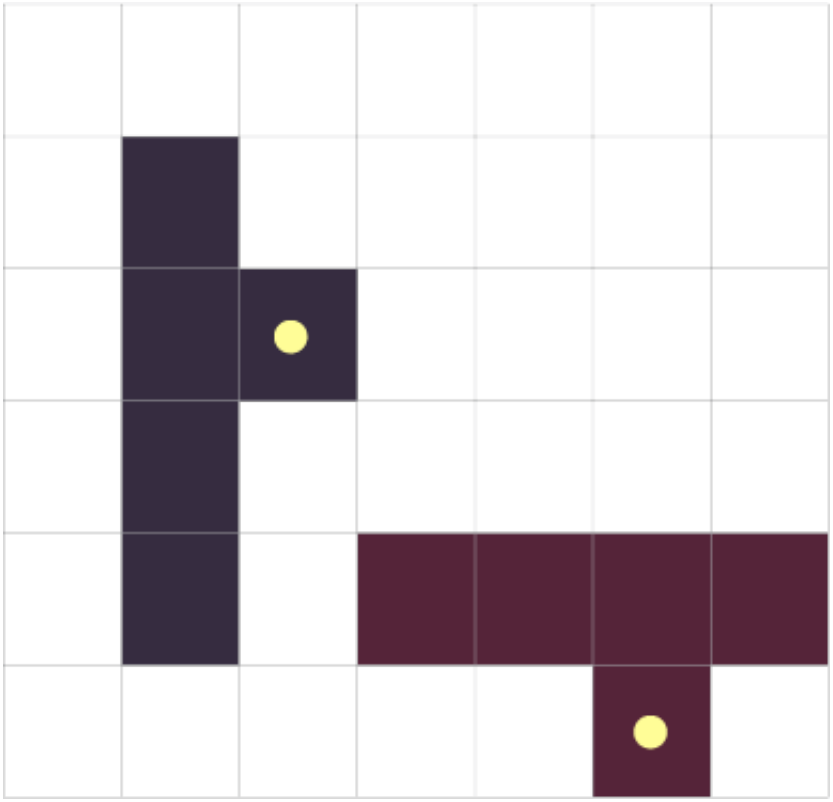
- Rotation
- Translation cum reflection
- Translation
- Reflection

23) How the following figures are moved? Is it translation or Reflection or Rotation or Dilation?



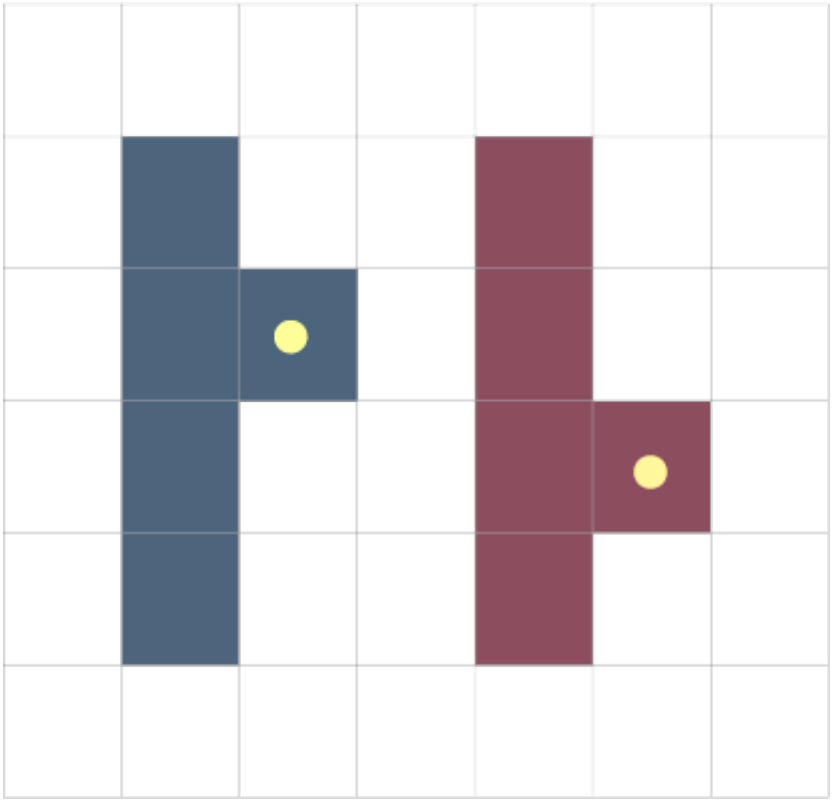
- Rotation
- Translation
- Translation cum reflection
- Reflection

24) How the following figures are moved? Is it translation or Reflection or Rotation or Dilation?



- Translation cum reflection
- Rotation
- Translation
- Reflection

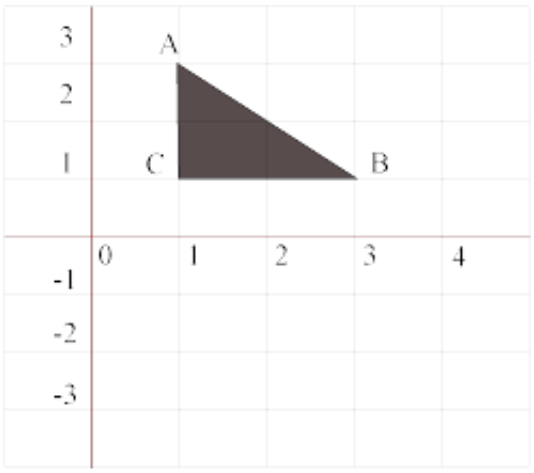
25) How the following figures are moved? Is it translation or Reflection or Rotation or Dilation?



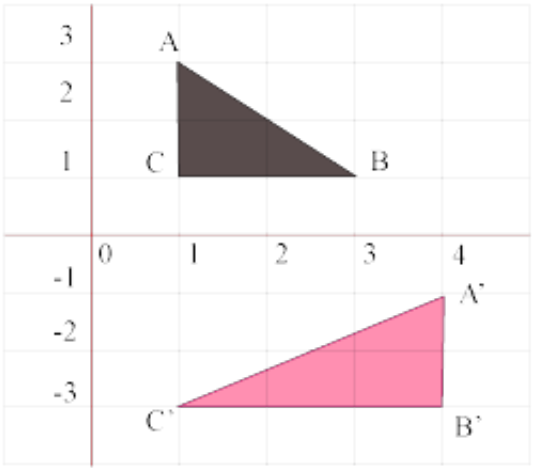
- Rotation
- Translation
- Reflection
- Translation cum reflection

26) Draw the pre-image of the following translations as per the given rule: Rotate 90° clockwise direction about the center (0, 0)

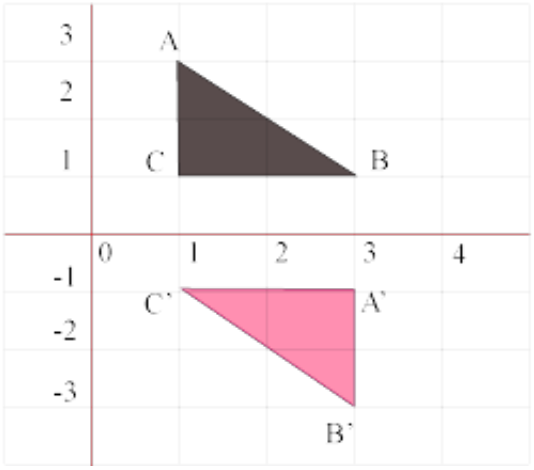
Q.



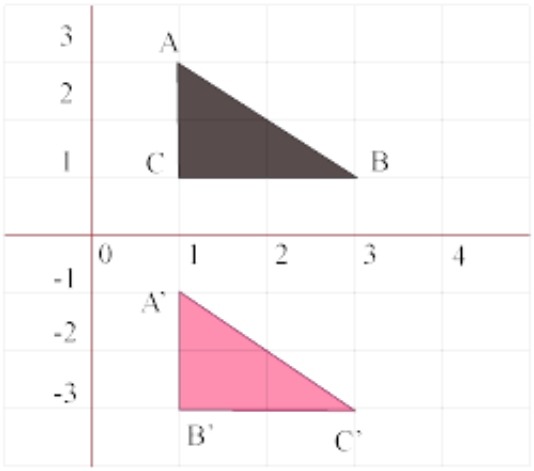
a.



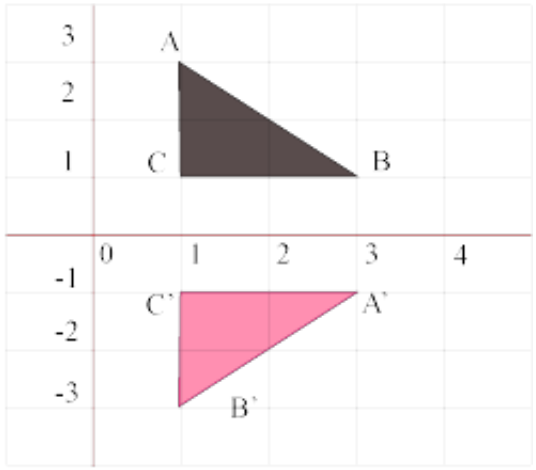
b.



c.



d.

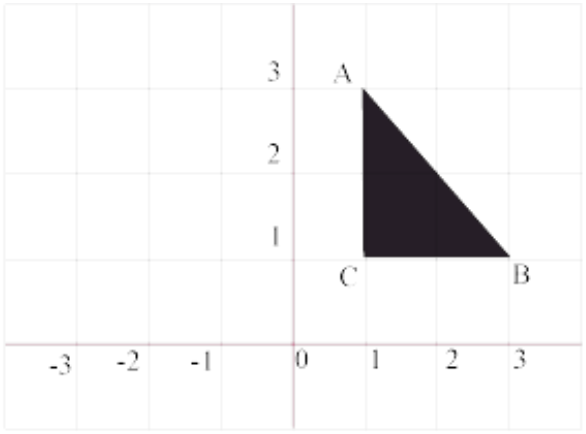


- b
- c
- d
- a

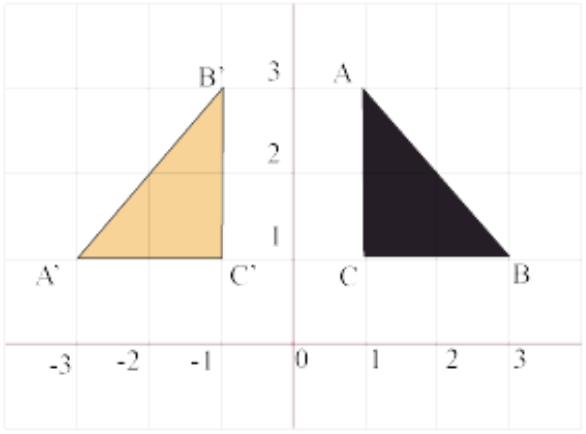
27) Draw the pre-image of the following translations as per the given rule: Rotate 90° counter clockwise

direction about the center (0, 0)

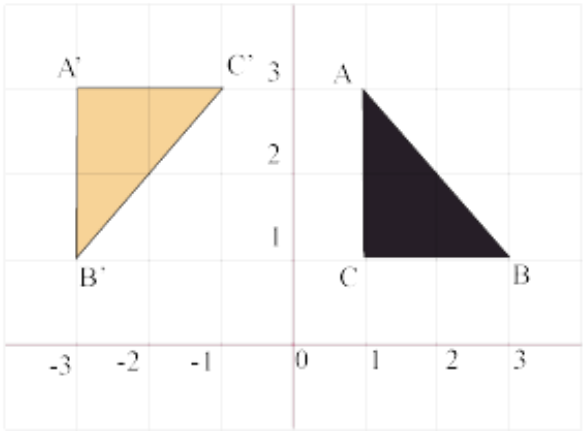
Q)



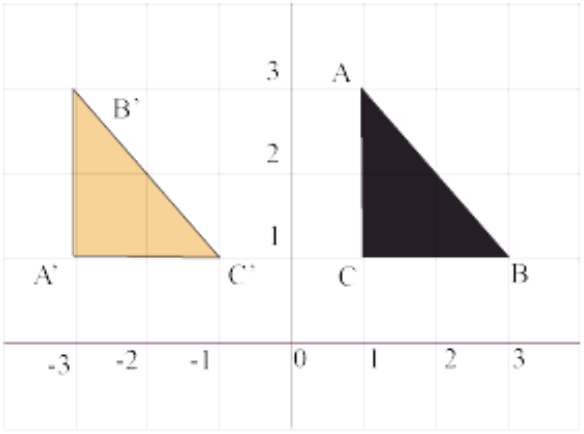
a)



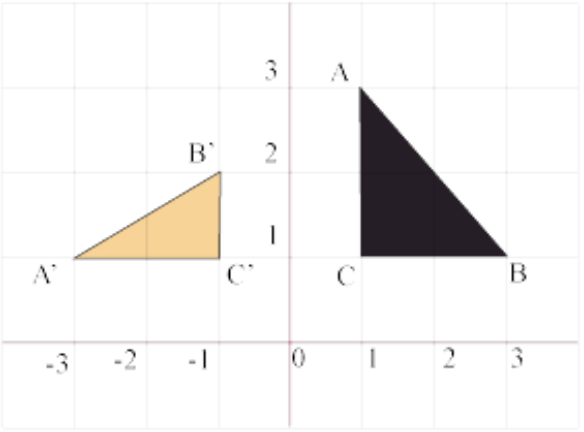
b)



c)



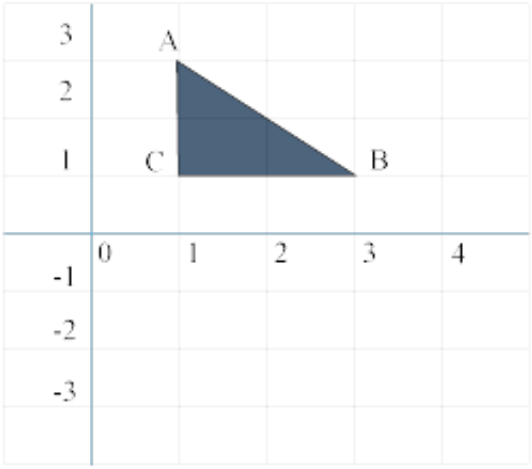
d)



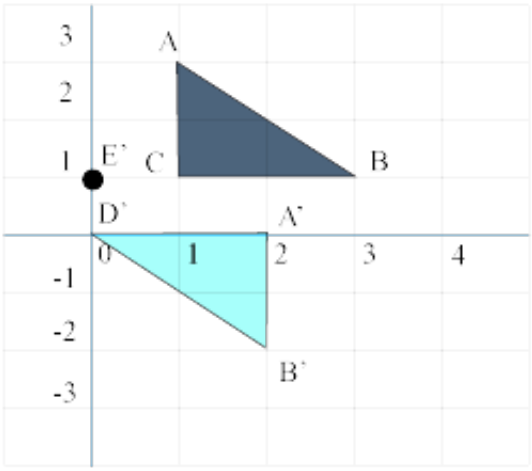
- b
- a
- d
- c

28) Draw the pre-image of the following translations as per the given rule: Rotate 90° clockwise direction about the center (0, 1)

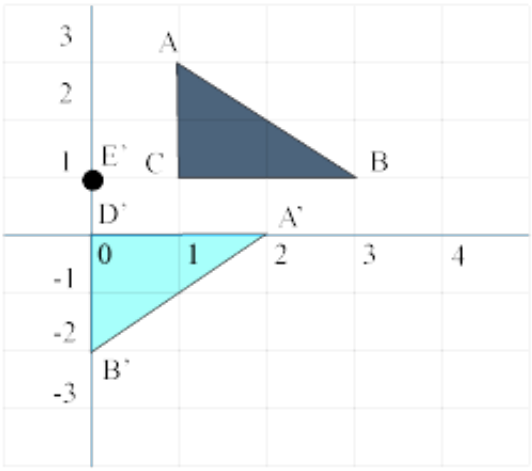
Q.



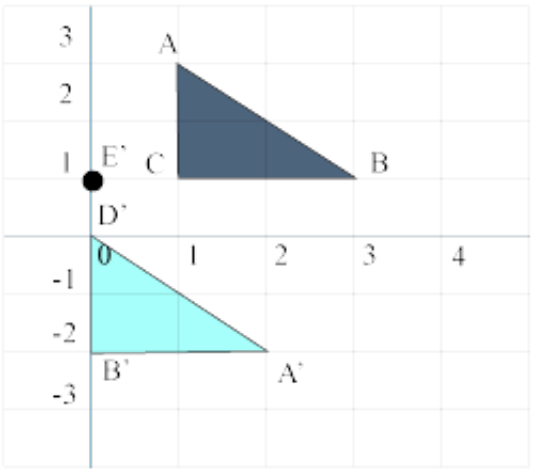
a.



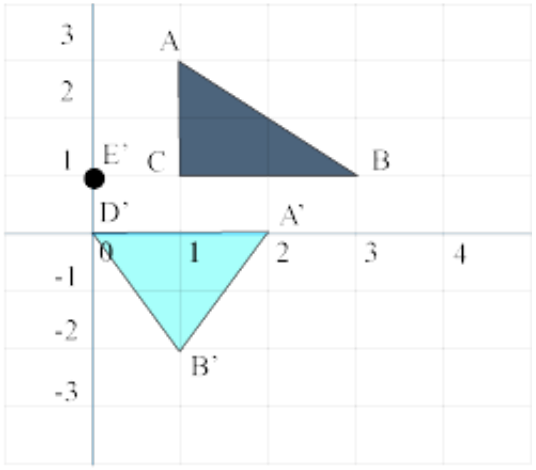
b.



c.



d.

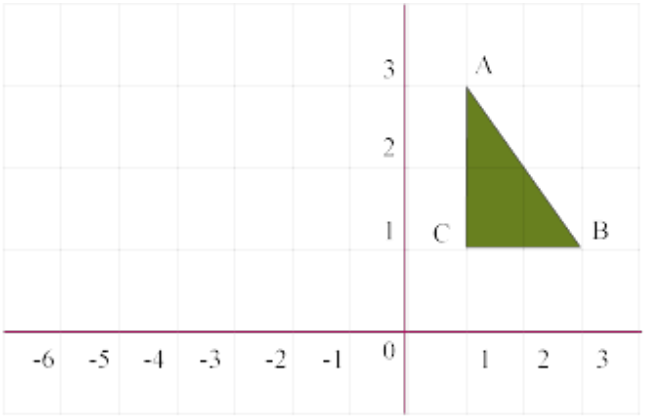


- b
- a
- c
- d

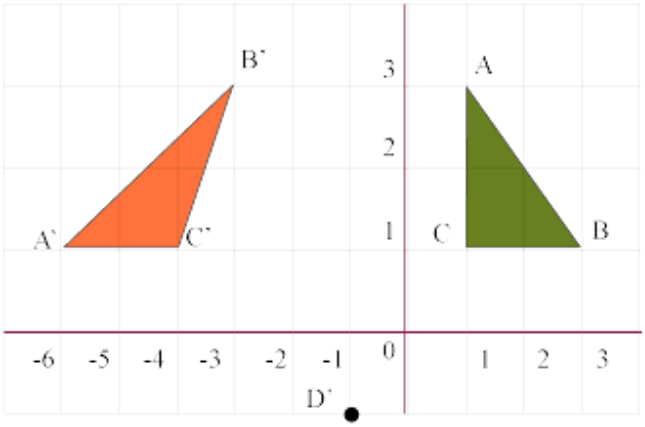
29) Draw the pre-image of the following translations as per the given rule: Rotate 90° counter clockwise

direction about the center (-1, -1)

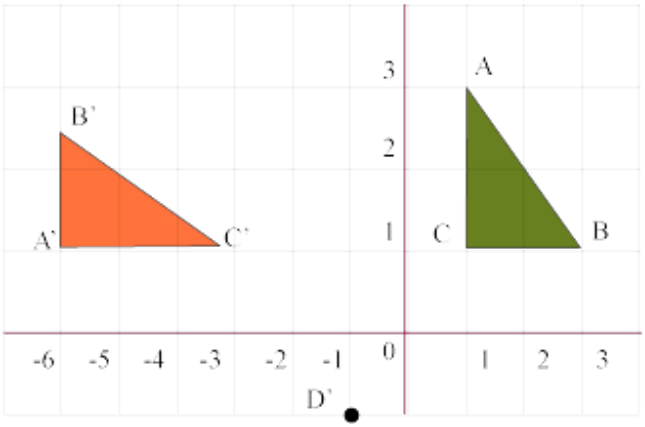
Q.



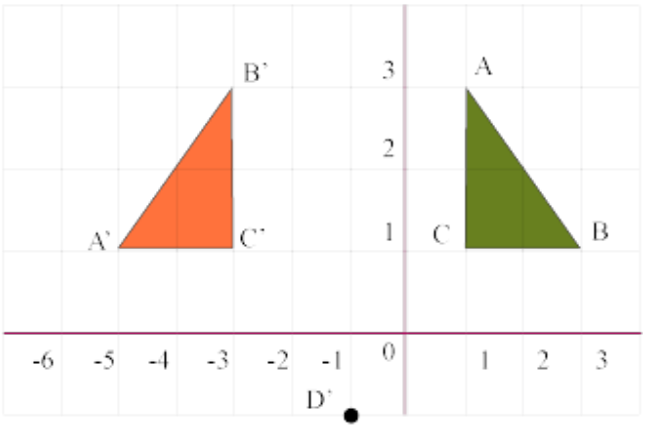
a.



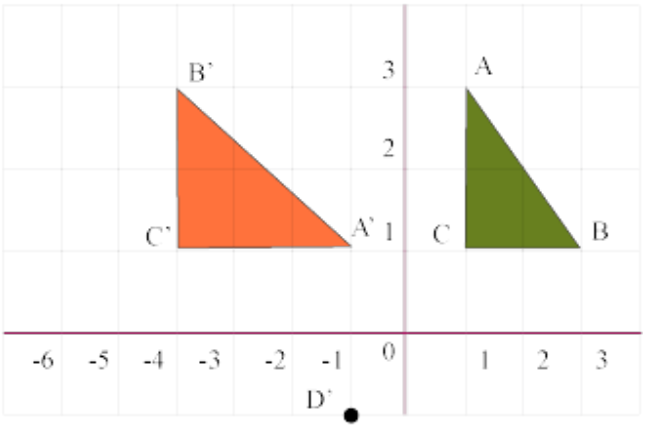
b.



c.



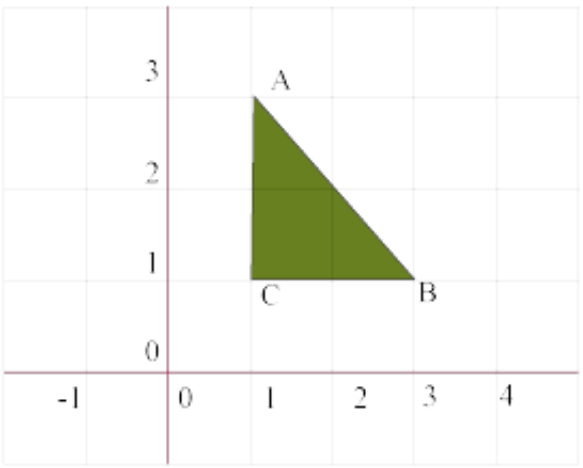
d.



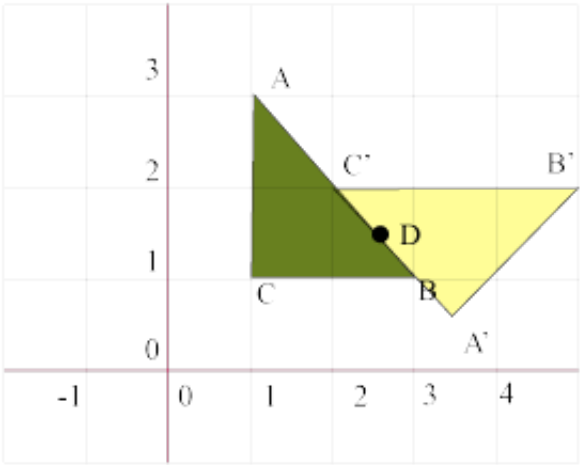
- c
- b
- d
- a

30) Draw the pre-image of the following translations as per the given rule: Rotate 90° clockwise direction about the center (2, 1).

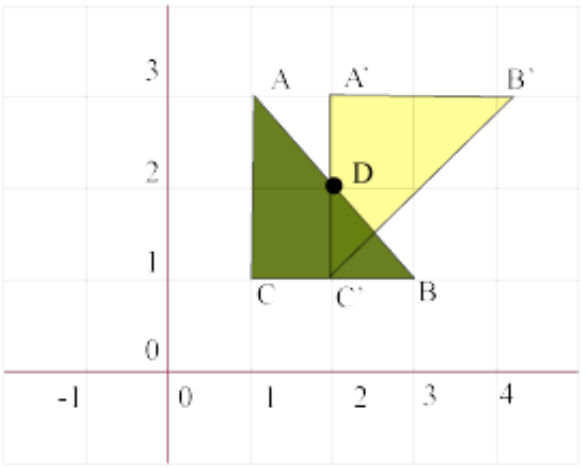
Q.


A
C
B
3
2
1
0
-1
0
1
2
3
4

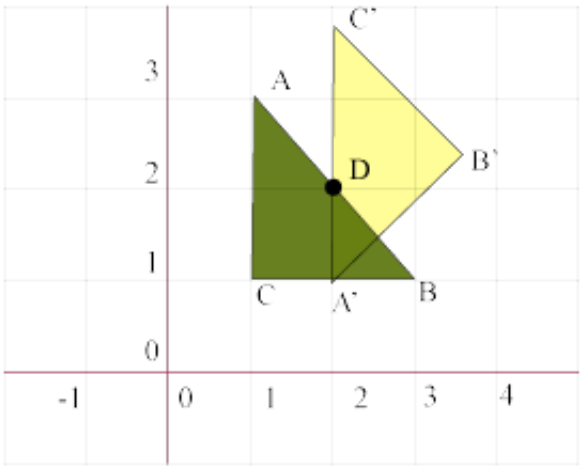
a.


A
C'
B'
D
C
B
A'
3
2
1
0
-1
0
1
2
3
4

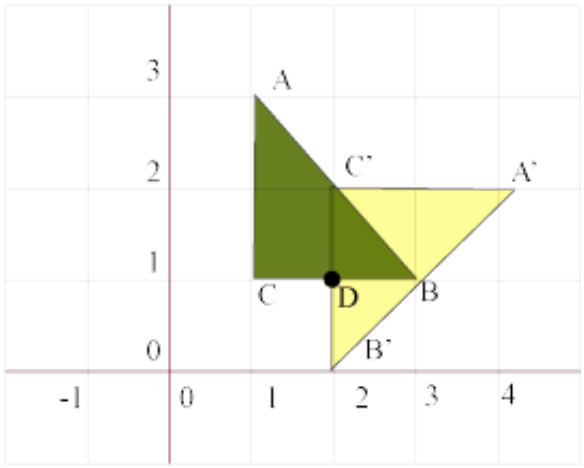
b.


A
A'
B'
D
C
C'
B
3
2
1
0
-1
0
1
2
3
4

c.


C'
A
B'
D
C
A'
B
3
2
1
0
-1
0
1
2
3
4

d.


A
C'
A'
C
D
B
B'
3
2
1
0
-1
0
1
2
3
4

- a
- c
- b
- d