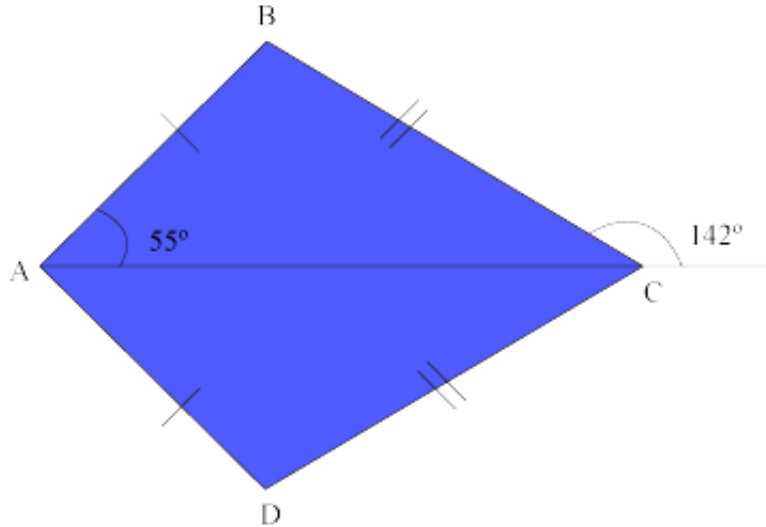




Eighth Grade - Geometry

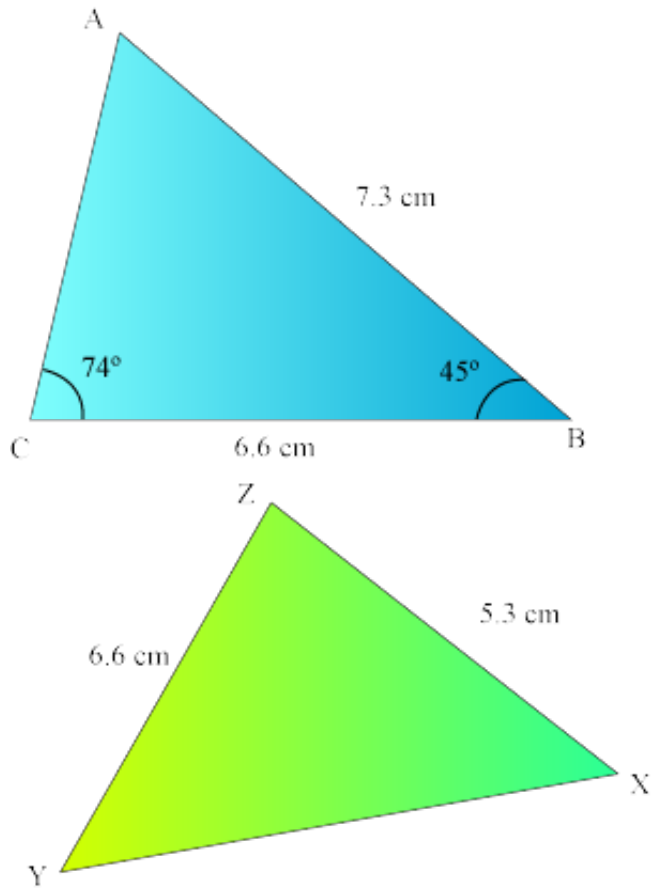
1) Given that the two triangles ABC and ADC below are congruent. Find

Find (a) $\angle ABC$, (b) $\angle ACD$



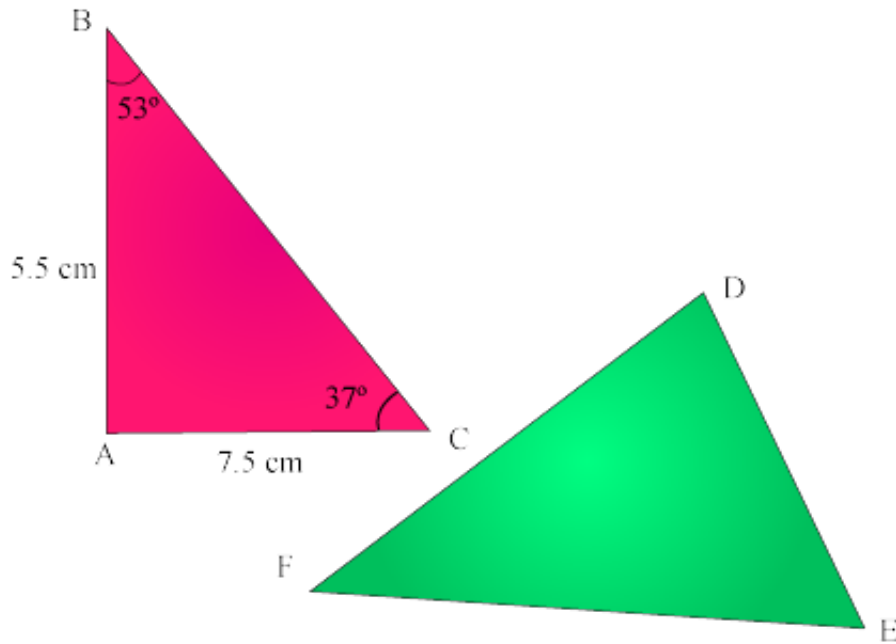
- a) 84° , b) 37°
- a) 81° , b) 32°
- a) 87° , b) 38°
- a) 82° , b) 35°

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



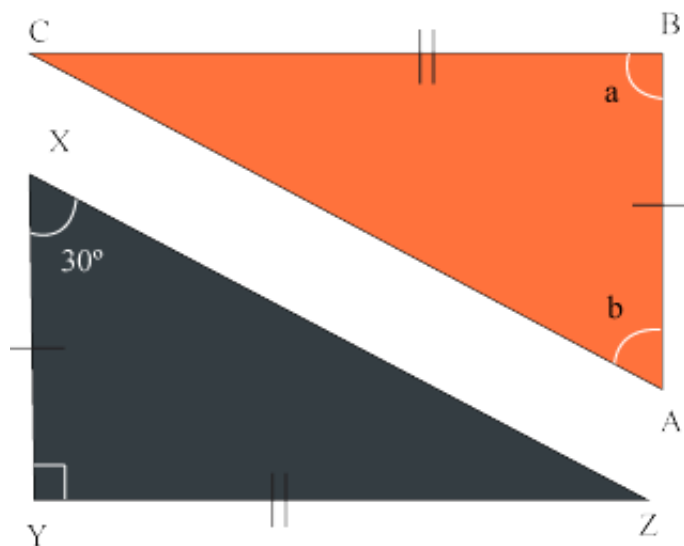
- a) 7.4 cm, b) 51°
- a) 7.3 cm, b) 61°
- a) 6.4 cm, b) 71°
- a) 8.3 cm, b) 81°

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



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

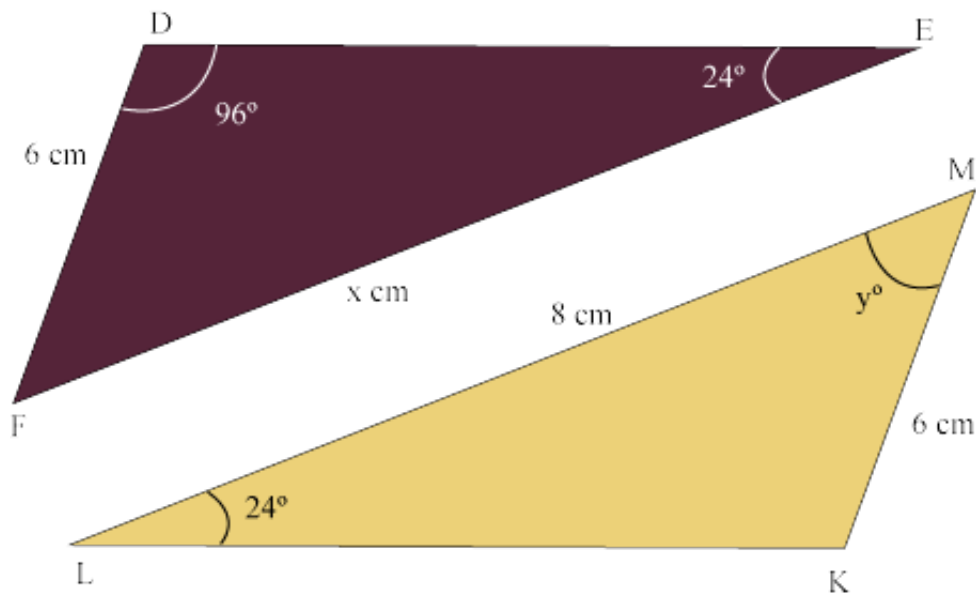
4) $\triangle XYZ$ is congruent to $\triangle ABC$. Find $\angle a$ and $\angle b$



- $\angle a = 70^\circ$ & $\angle b = 10^\circ$
- $\angle a = 50^\circ$ & $\angle b = 40^\circ$
- $\angle a = 60^\circ$ & $\angle b = 20^\circ$
- $\angle a = 90^\circ$ & $\angle b = 30^\circ$

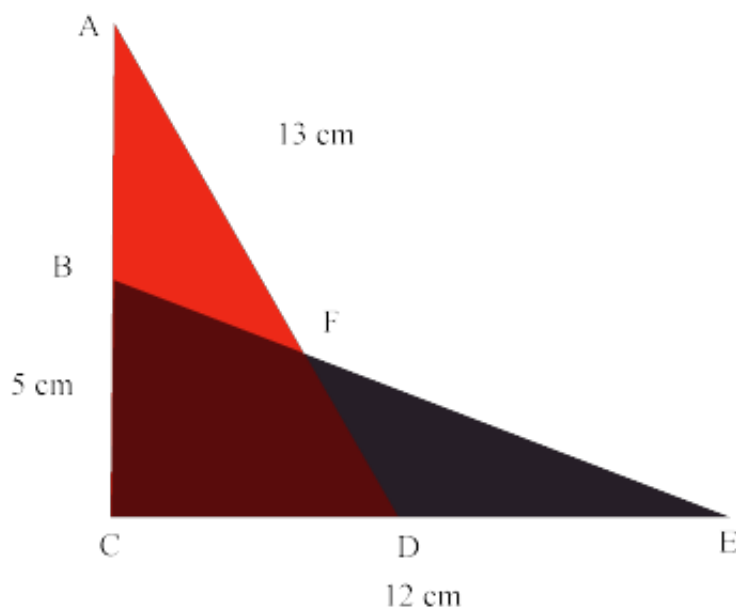


5) Given that $\triangle DEF$ and $\triangle KLM$ in the diagram below are congruent, find the values of x and y .



- $x = 8\text{ cm}$, $y = 60^\circ$
- $x = 6\text{ cm}$, $y = 50^\circ$
- $x = 7\text{ cm}$, $y = 10^\circ$
- $x = 7\text{ cm}$, $y = 70^\circ$

6) $\triangle ACD$ is congruent to $\triangle ECB$. $CE = 12\text{ cm}$, $AD = 13\text{ cm}$ and $BC = 5\text{ cm}$. Find the length of AB

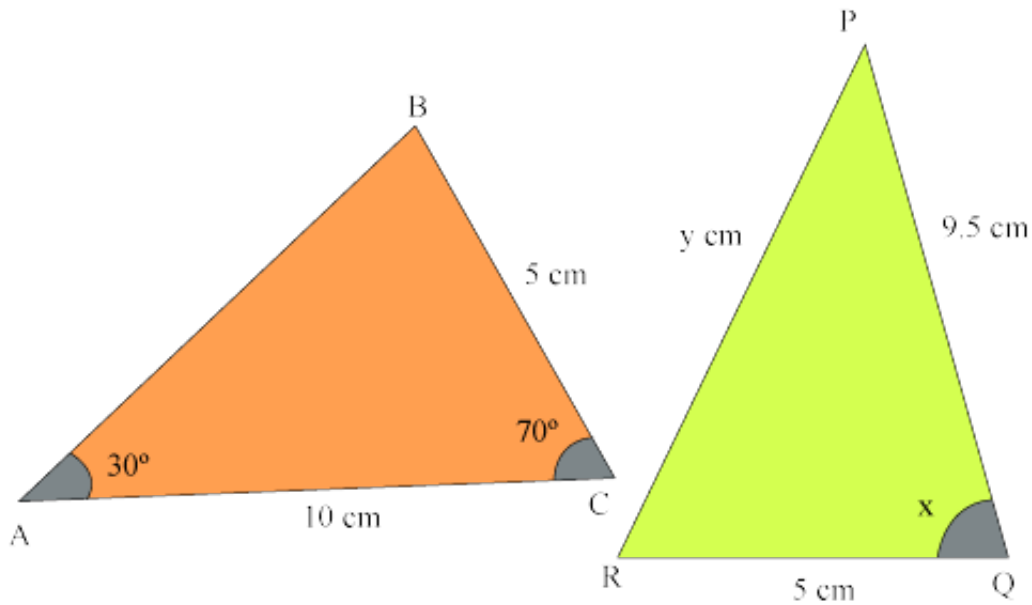


- 7 cm



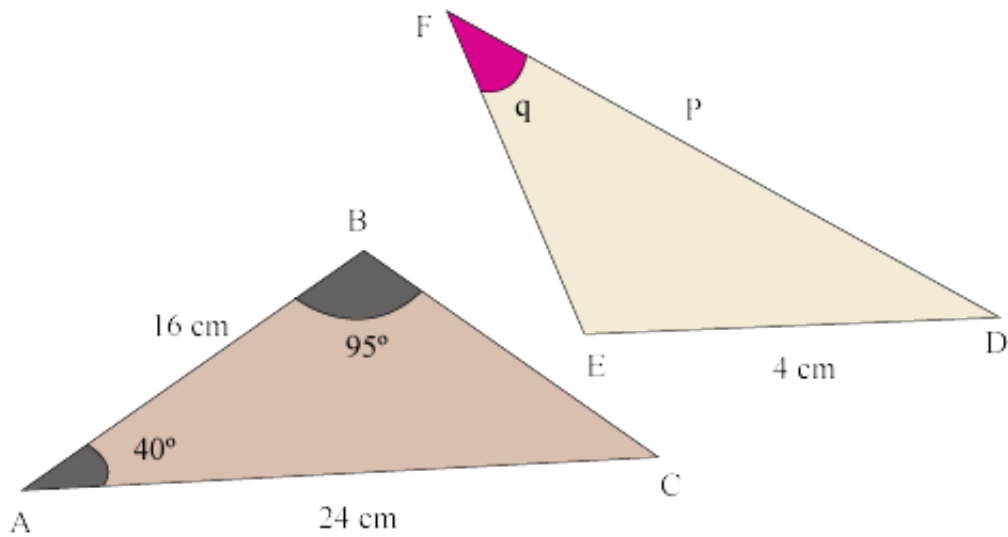
- 8 cm
- 1 cm
- 3 cm

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



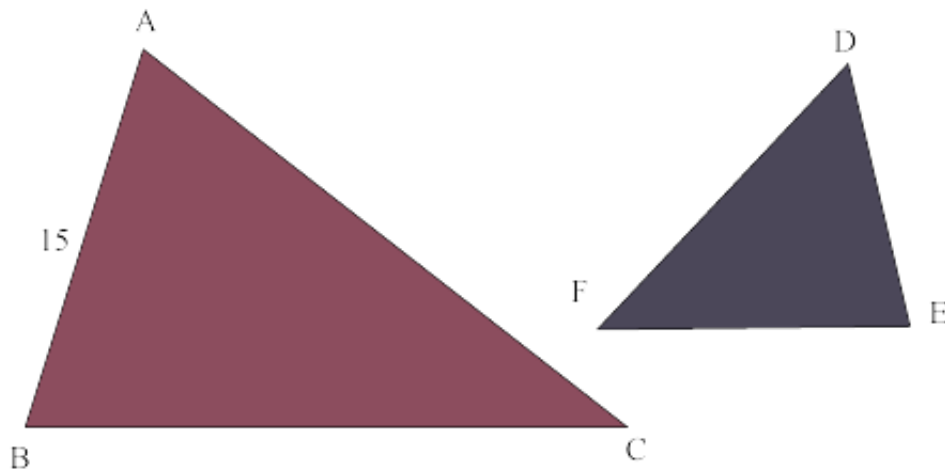
- a) 80° , b) 10 cm
- a) 10° , b) 60 cm
- a) 70° , b) 20 cm
- a) 60° , b) 80 cm

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



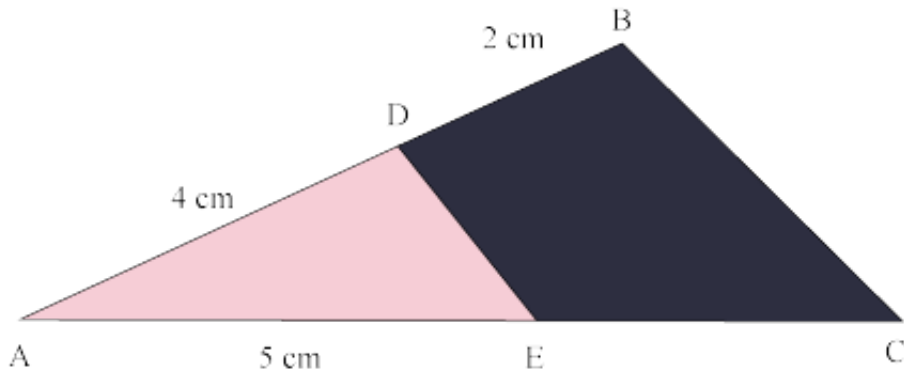
- a) 46° , b) 2 cm
- a) 41° , b) 3 cm
- a) 45° , b) 6 cm
- a) 47° , b) 5 cm

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



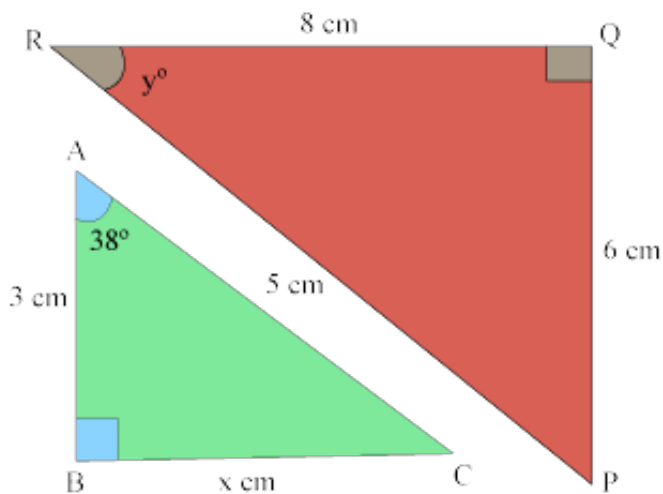
- 2
- 3
- 8
- 7

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



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

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

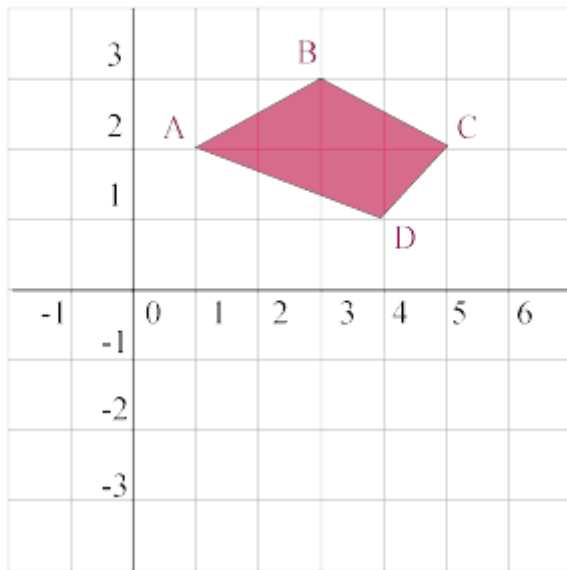


- $x = 8\text{cm}$, $y = 12^\circ$
- $x = 5\text{cm}$, $y = 42^\circ$
- $x = 4\text{cm}$, $y = 52^\circ$
- $x = 6\text{cm}$, $y = 32^\circ$

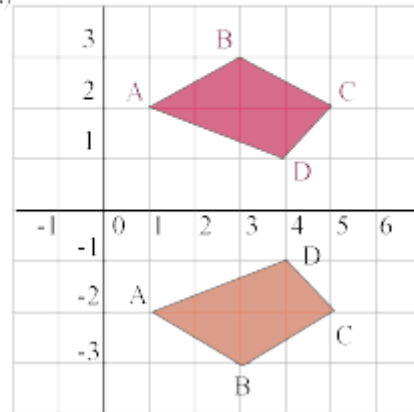
12) Graph the image of the figure using the transformation given: Reflection about x-axis:



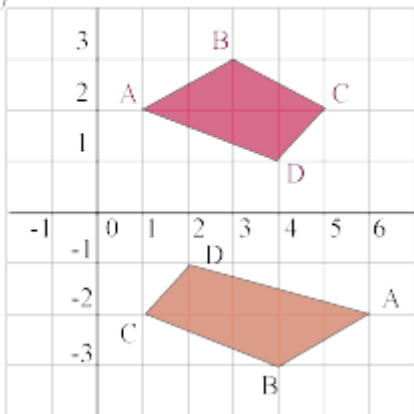
Q



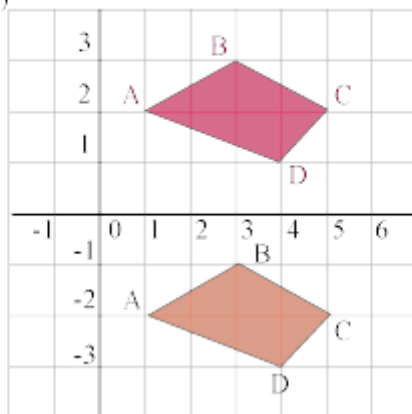
(a)



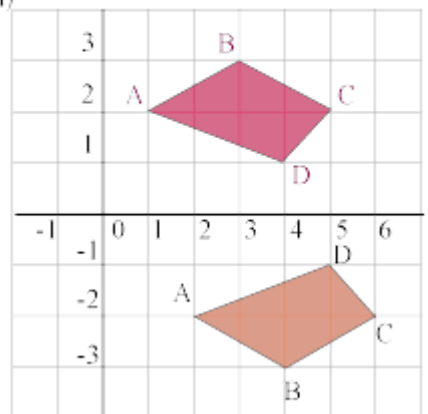
(b)



(c)



(d)

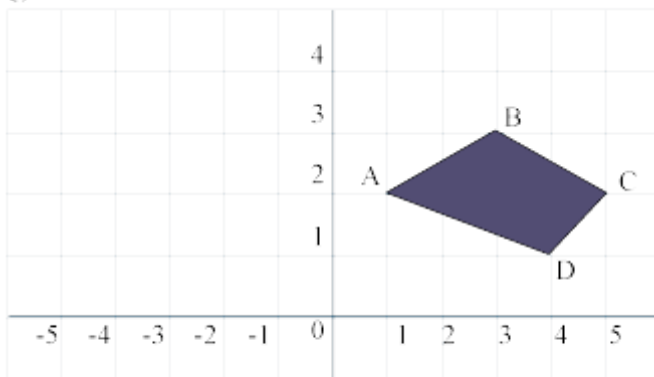


- c
- d
- b
- a

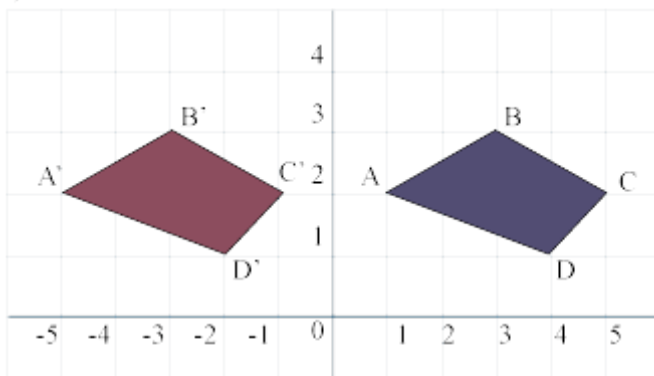
13) Graph the image of the figure using the transformation given: Reflection about y-axis:



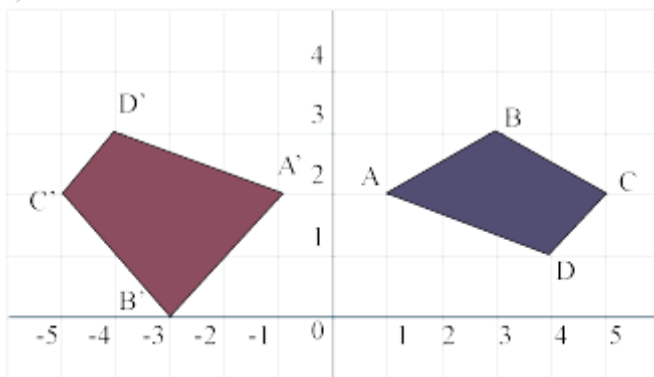
Q)



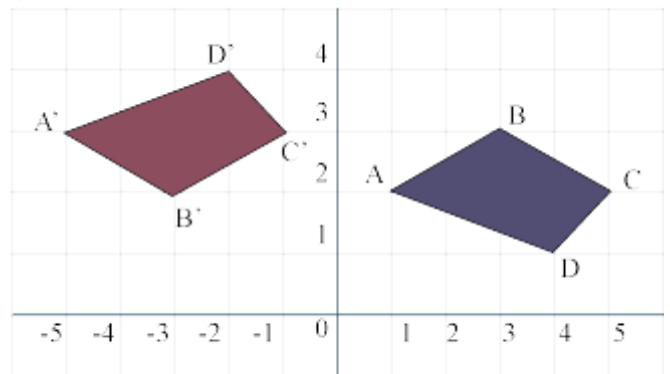
a)



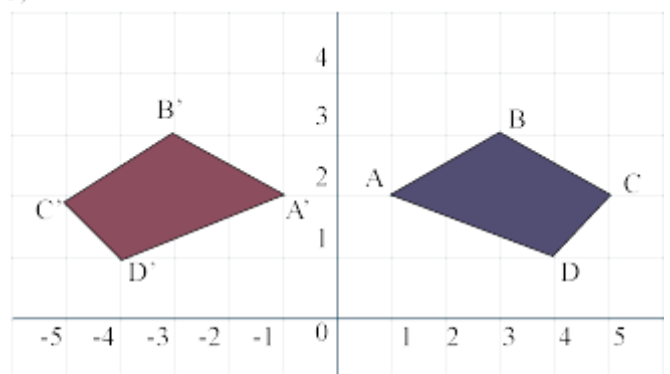
b)



c)



d)

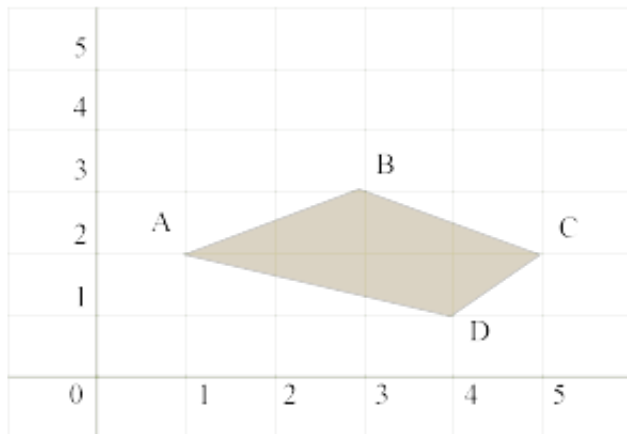


- c
- b
- a
- d

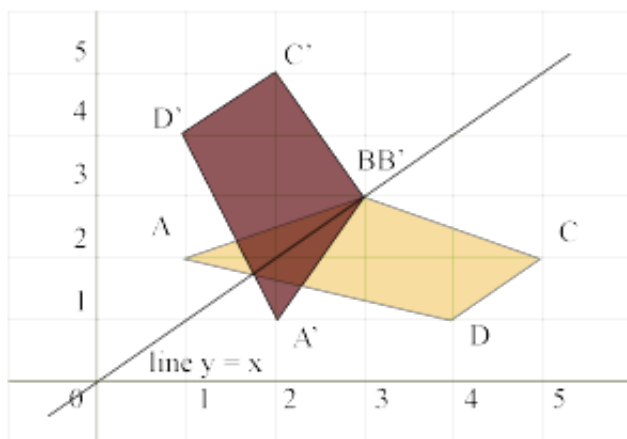
14) Graph the image of the figure using the transformation given: Reflection about $y = x$



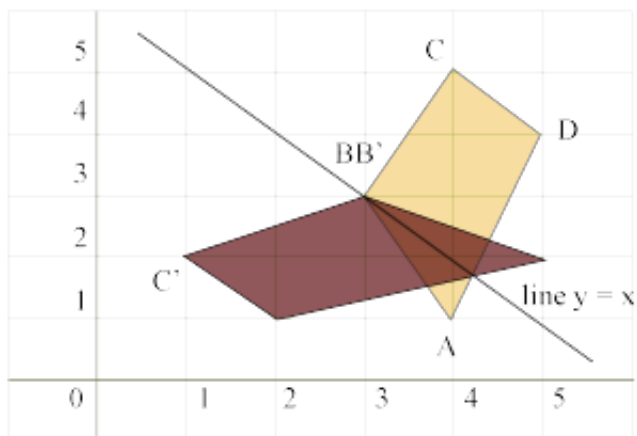
Q.



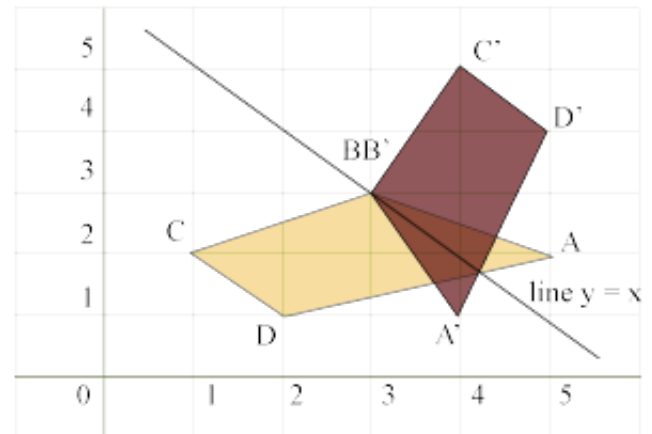
a.



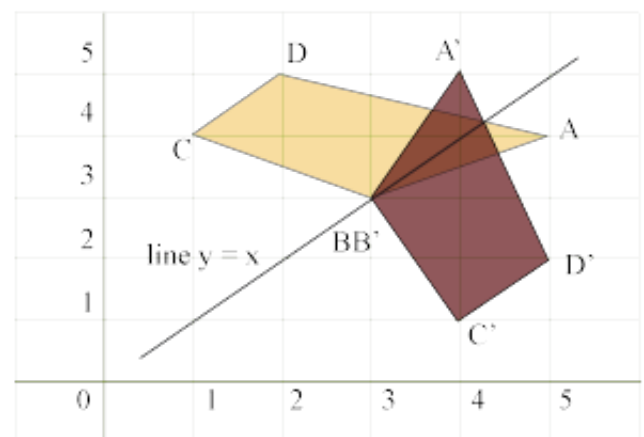
b.



c.



d.

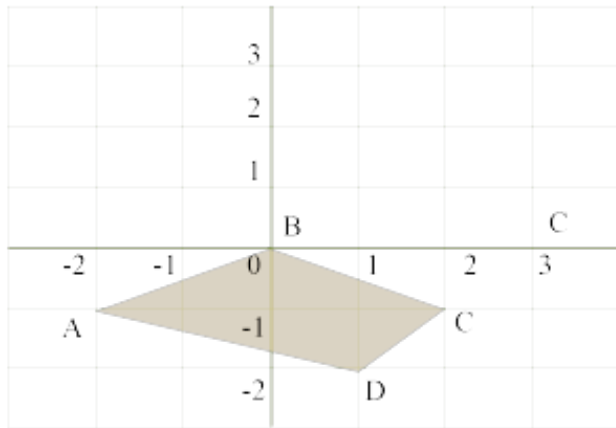


- a
- c
- d
- b

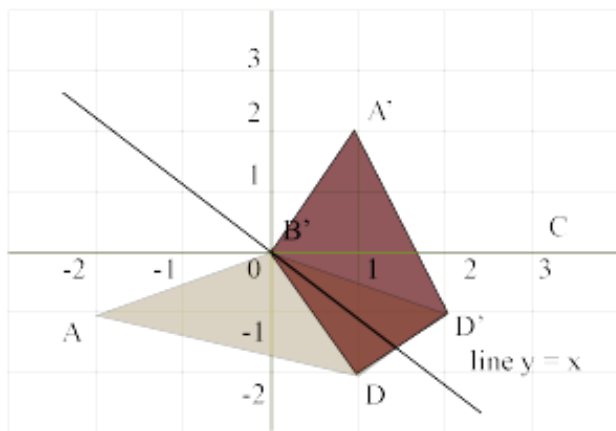
15) Graph the image of the figure using the transformation given: Reflection about $y = -x$



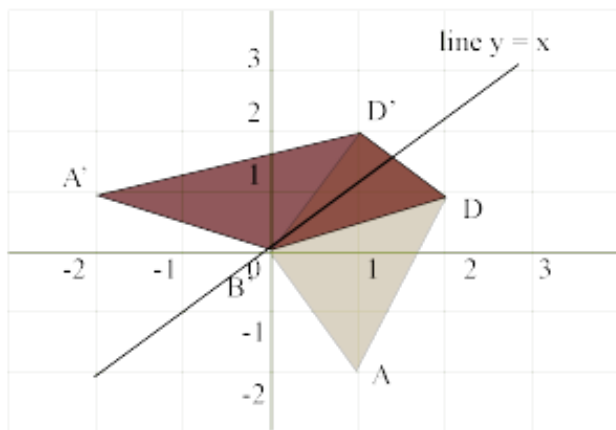
Q.



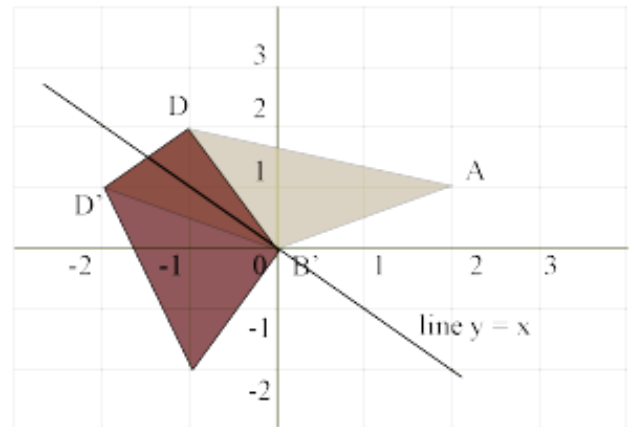
a.



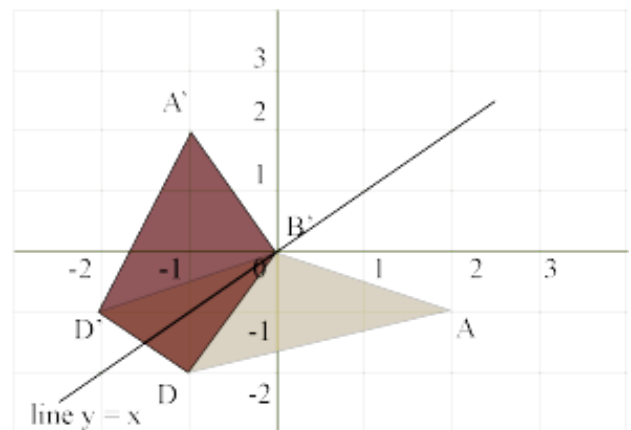
b.



c.

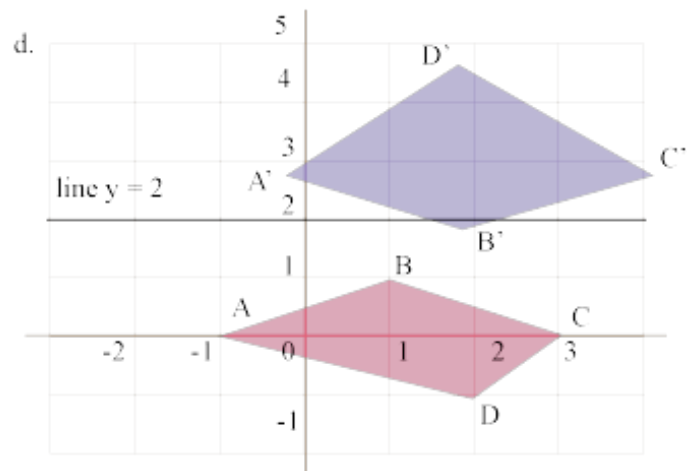
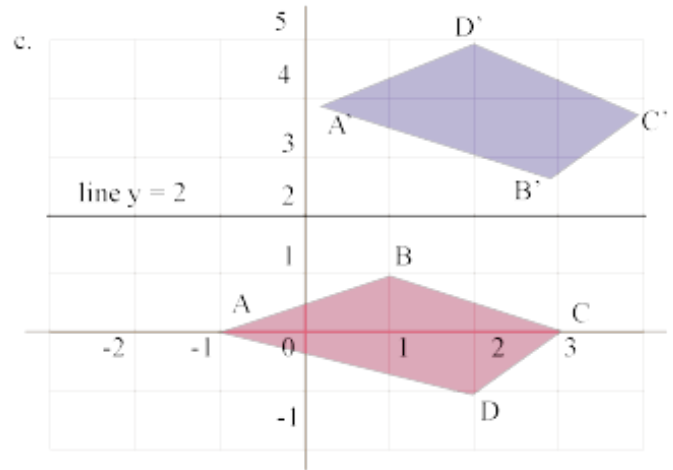
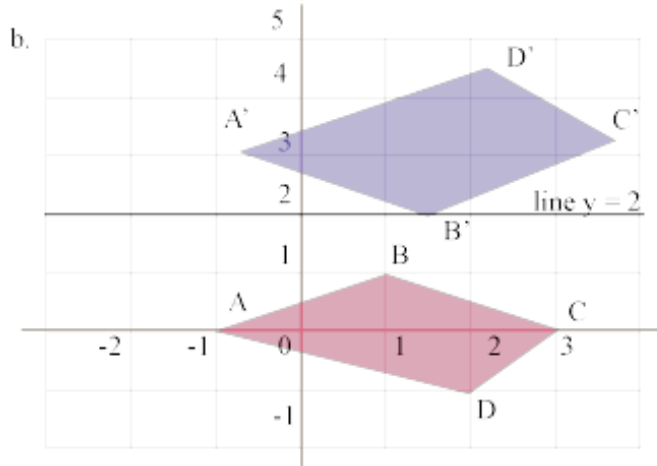
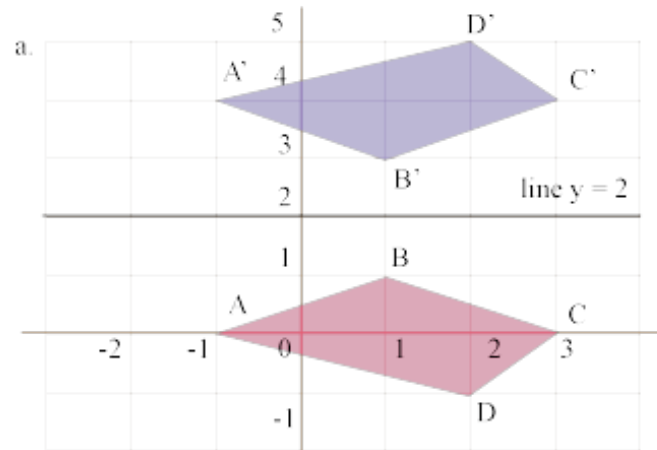
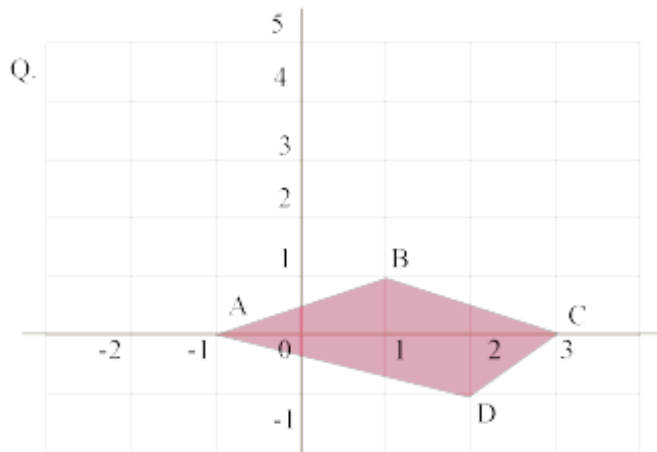


d.



- d
- c
- a
- b

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

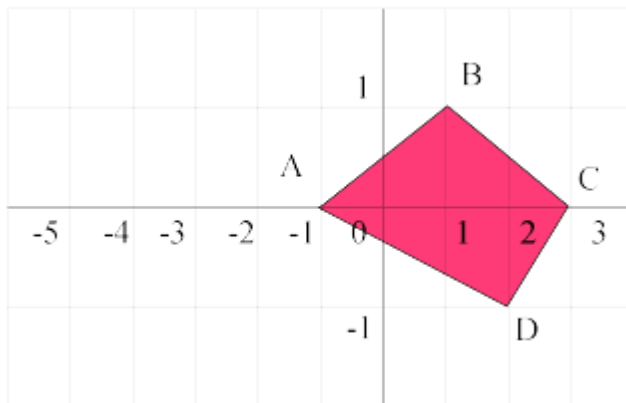


- a
- d
- b
- c

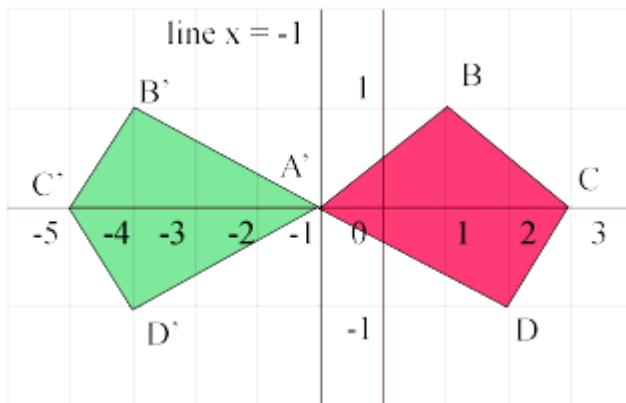
17) Graph the image of the figure using the transformation given: Reflection about $x = -1$



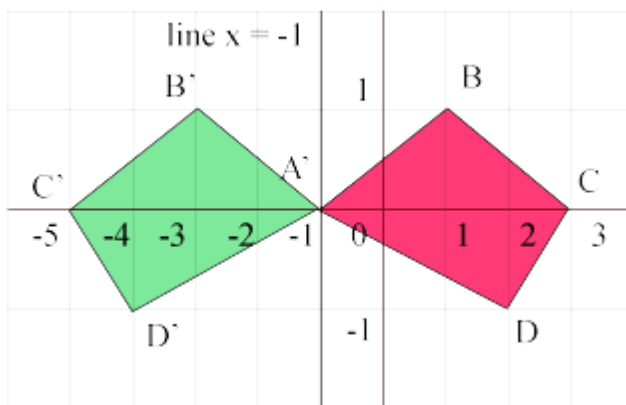
Q.



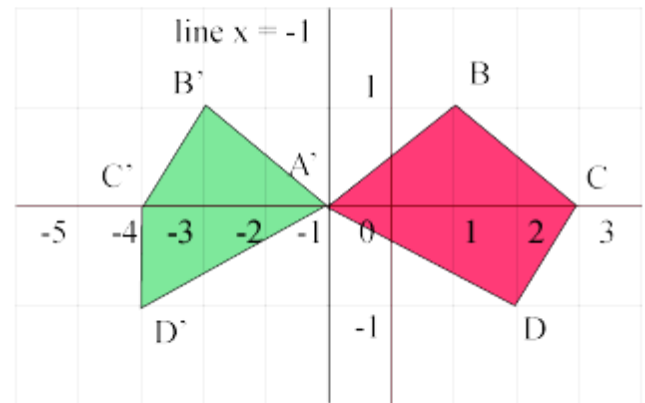
a.



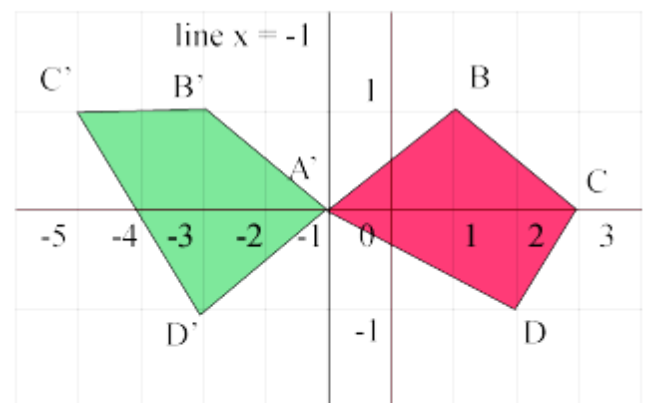
b.



c.

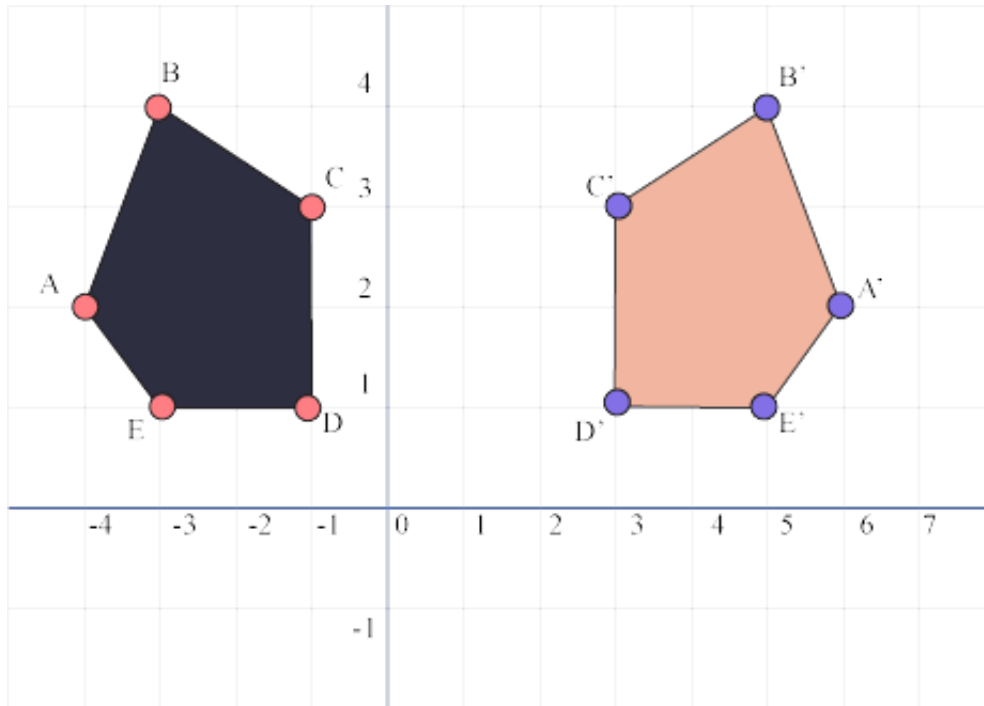


d.



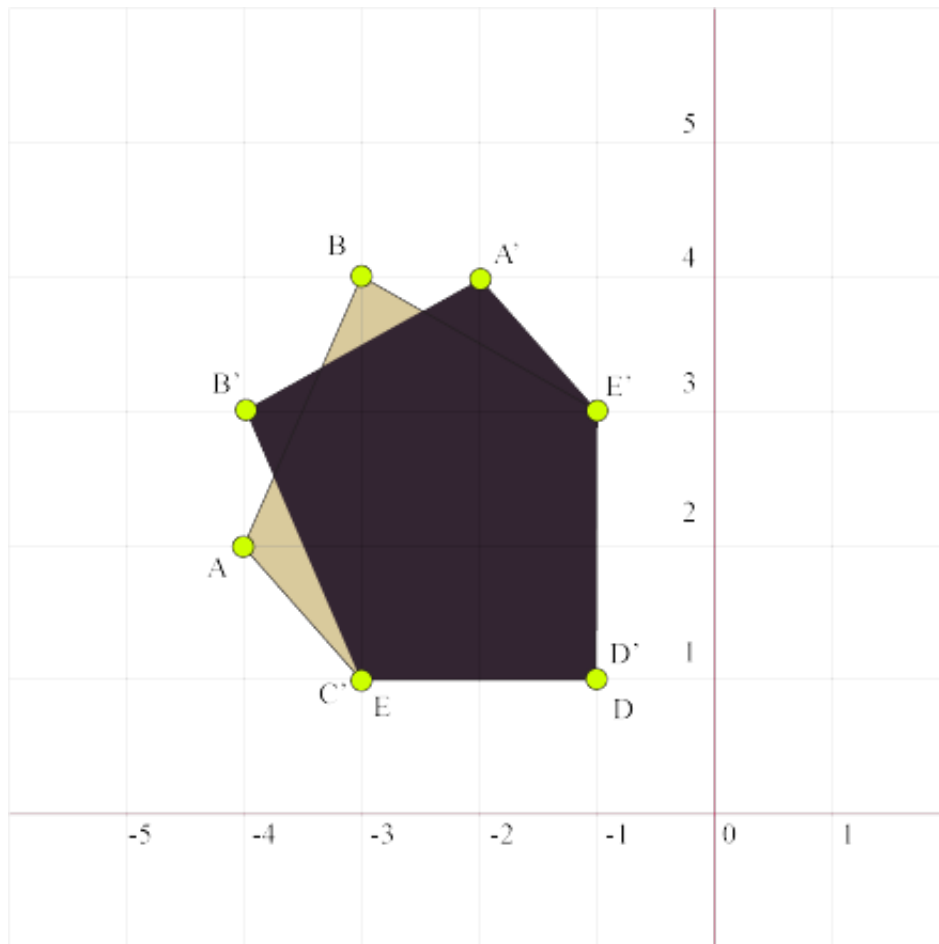
- c
- a
- b
- d

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



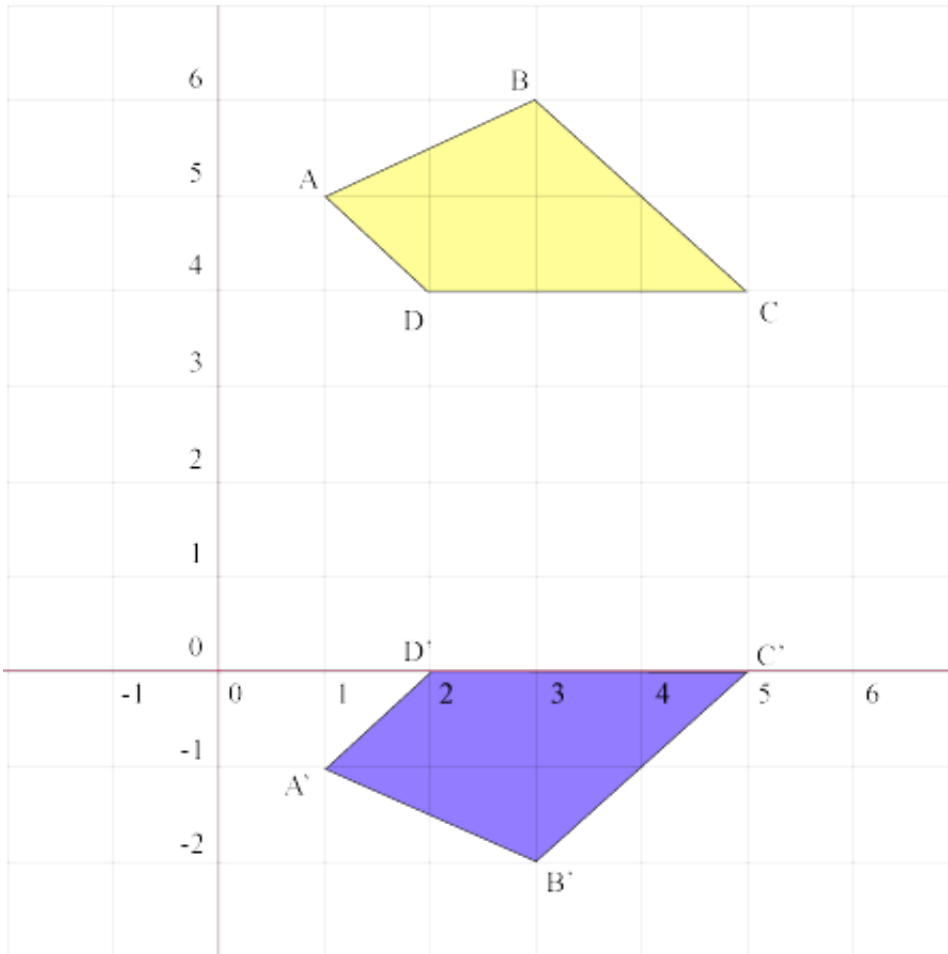
- $x = 3$
- $x = 1$
- $x = 4$
- $x = 2$

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



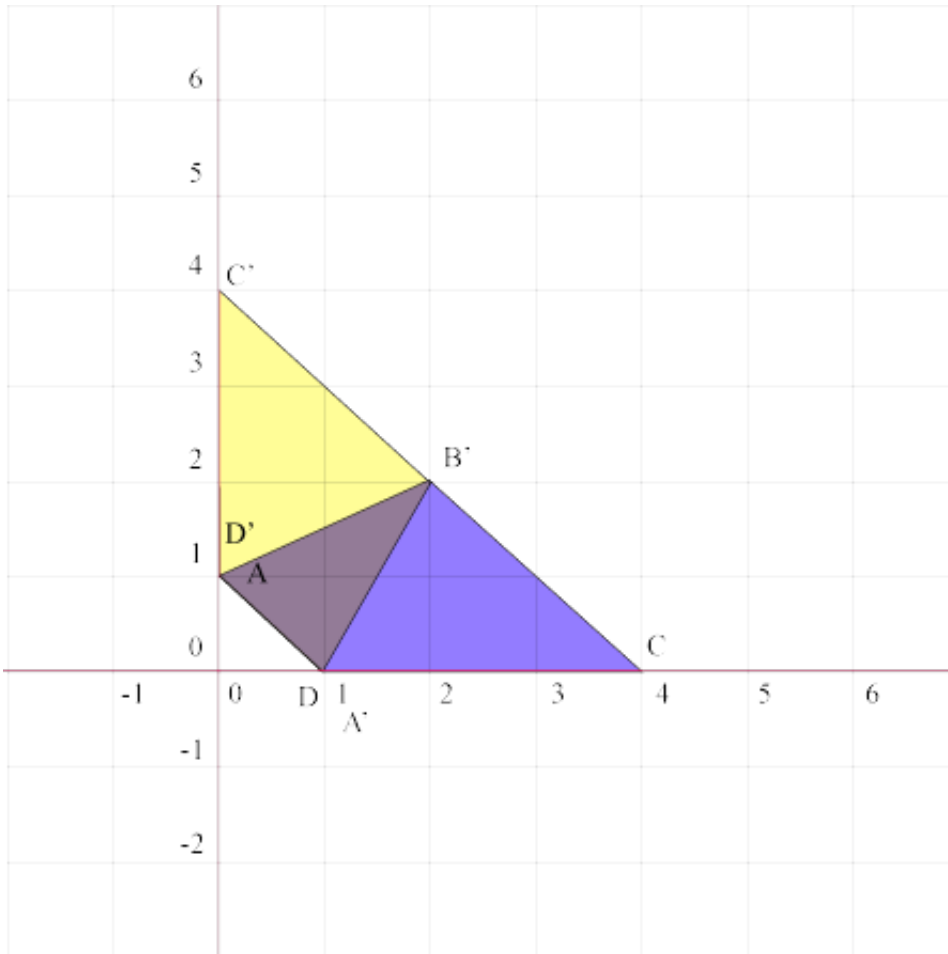
- $y = y$
- $y = -y$
- $y = x$
- $y = -x$

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



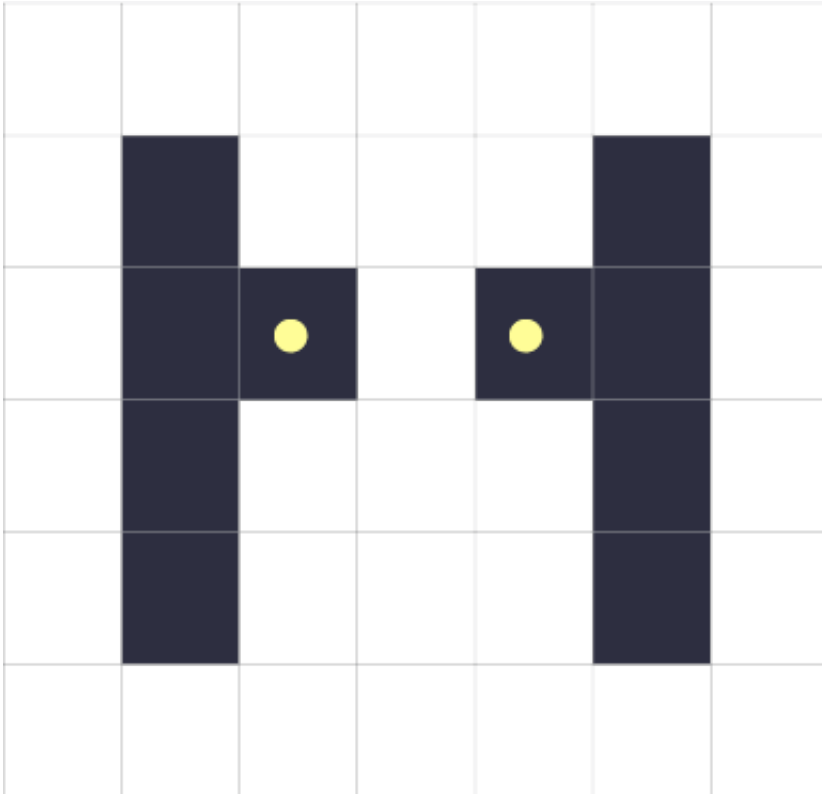
- $y = 4$
- $y = 2$
- $y = 3$
- $y = 5$

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



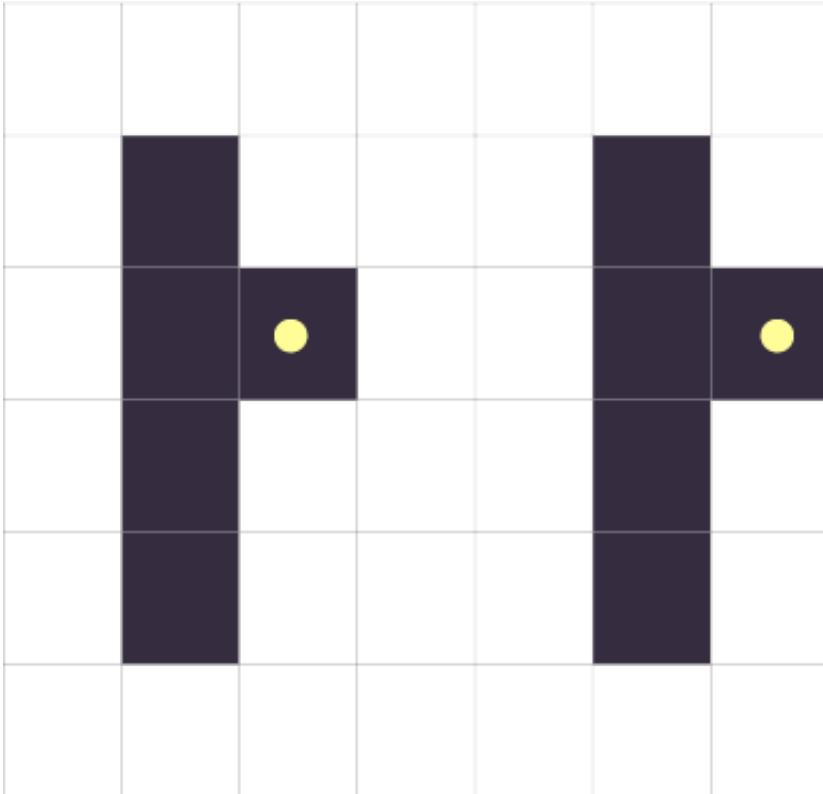
- $y = y$
- $y = -y$
- $y = x$
- $y = -x$

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



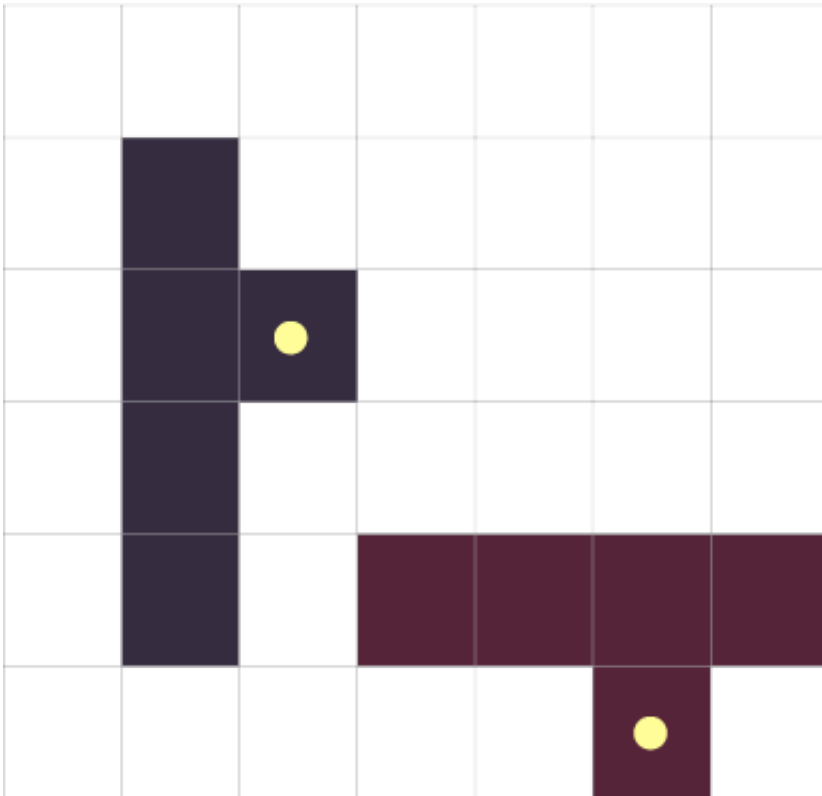
- Reflection
- Rotation
- Translation cum reflection
- Translation

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



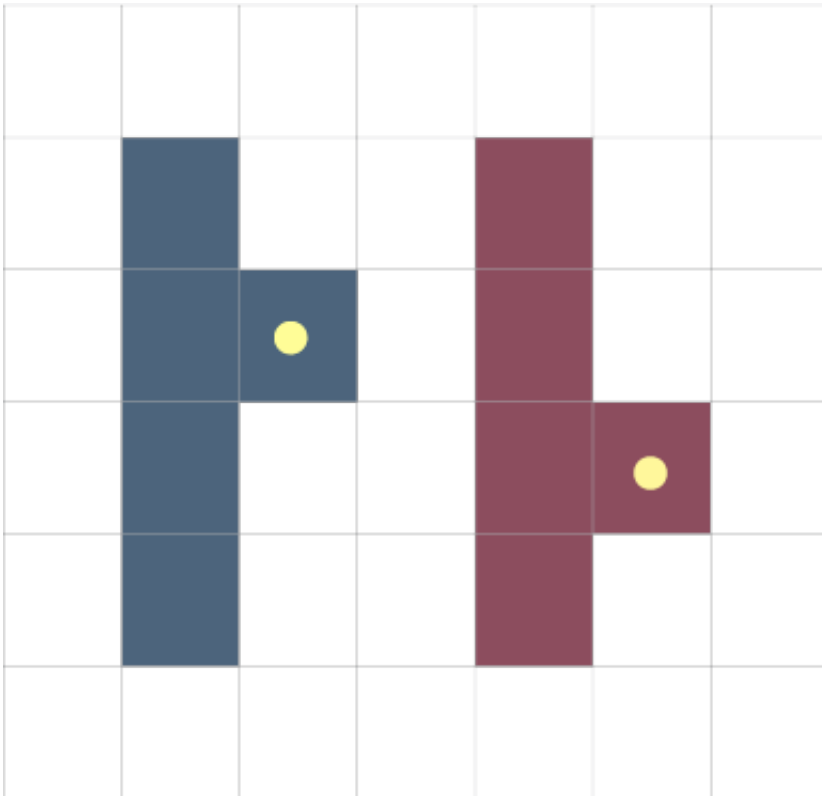
- Translation cum reflection
- Rotation
- Reflection
- Translation

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



- Translation cum reflection
- Translation
- Reflection
- Rotation

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

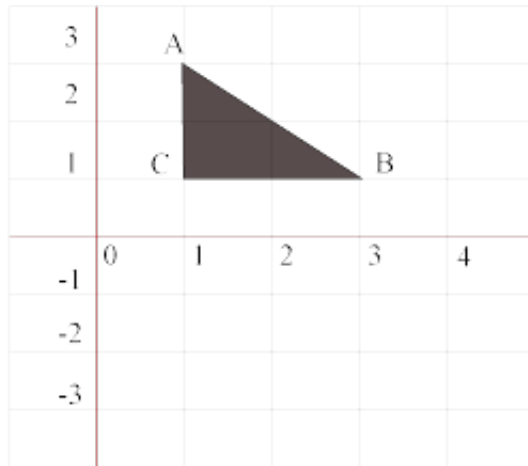


- Reflection
- Rotation
- Translation
- Translation cum reflection

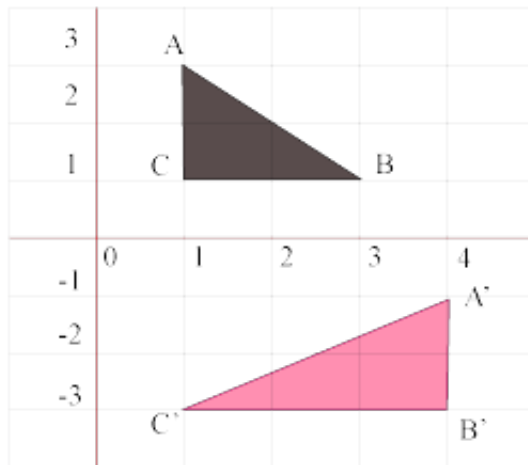
26) Draw the pre-image of the following translations as per the given rule: Rotate 90° clockwise direction about the center $(0, 0)$



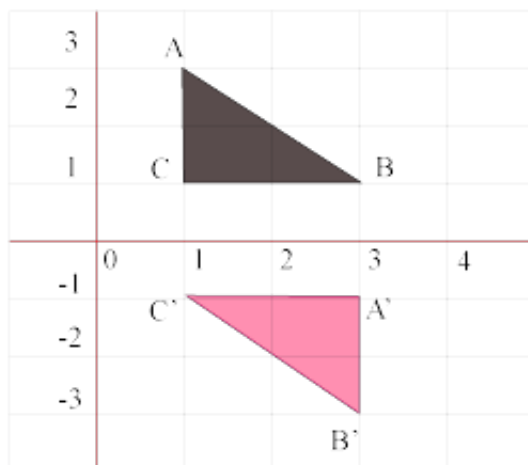
Q.



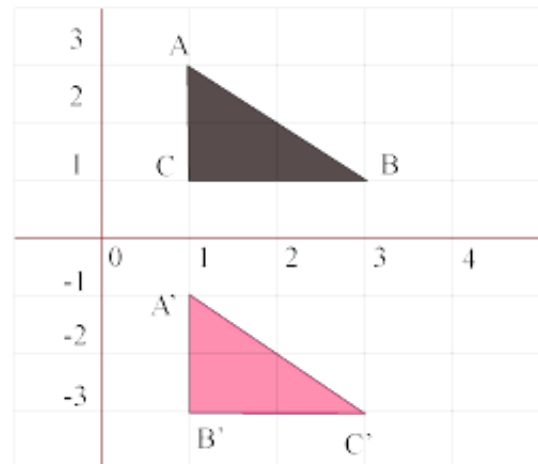
a.



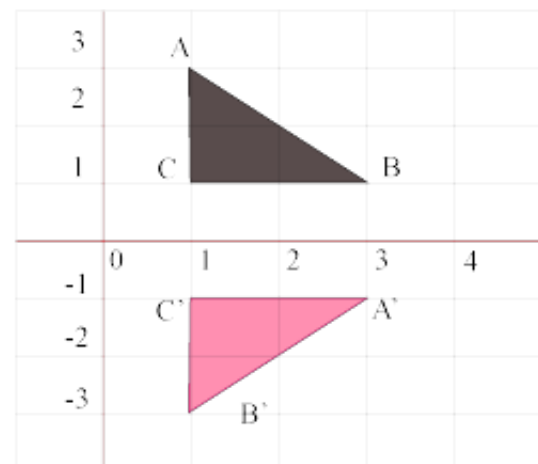
b.



c.



d.



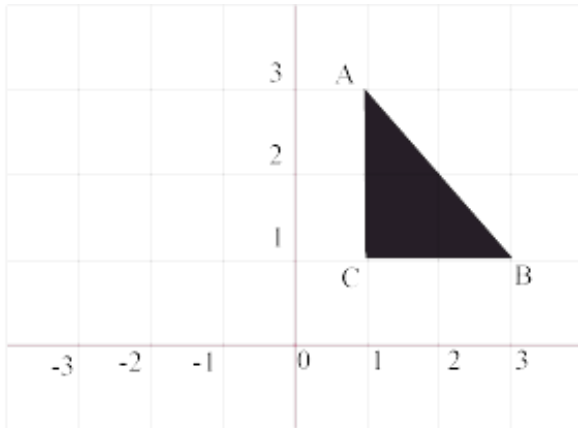
- a
- b
- c
- d

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

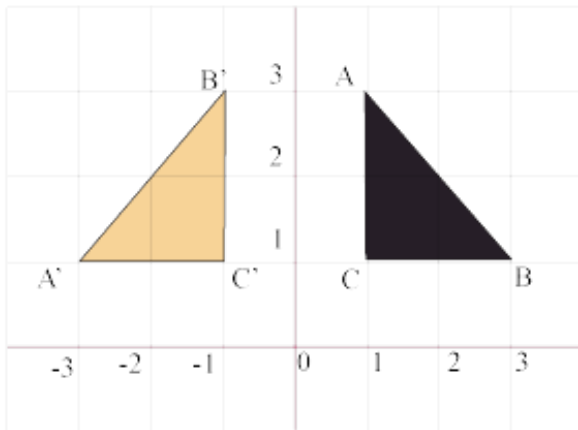


direction about the center $(0, 0)$

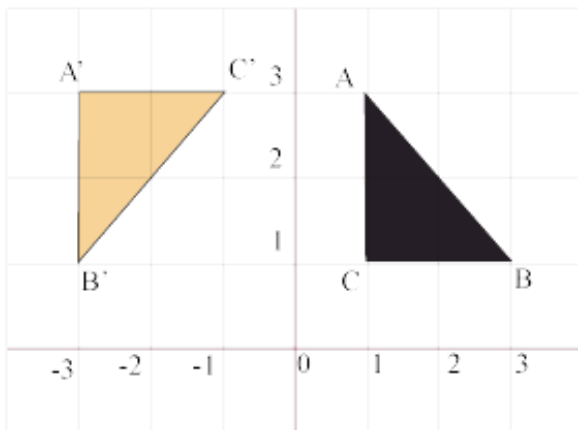
Q)



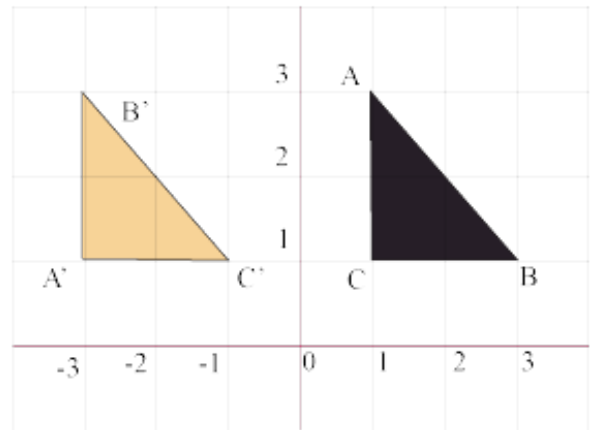
a)



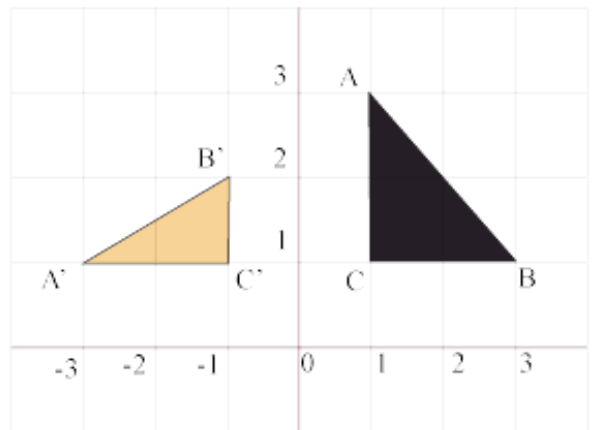
b)



c)



d)

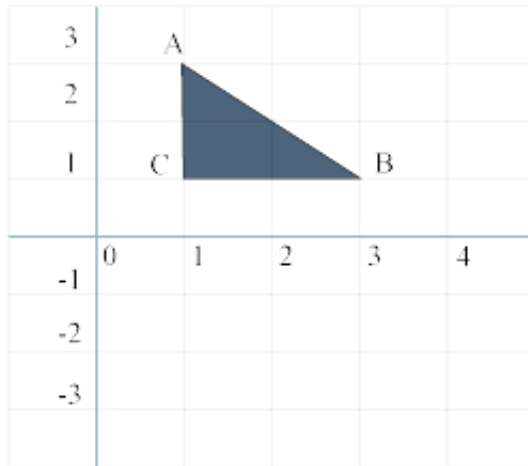


- b
- a
- c
- d

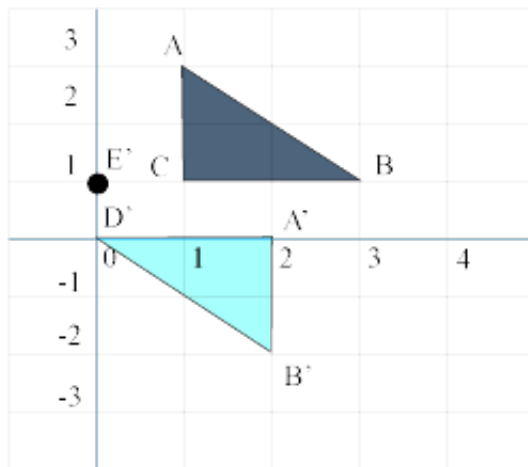
28) Draw the pre-image of the following translations as per the given rule: Rotate 90° clockwise direction about the center $(0, 1)$



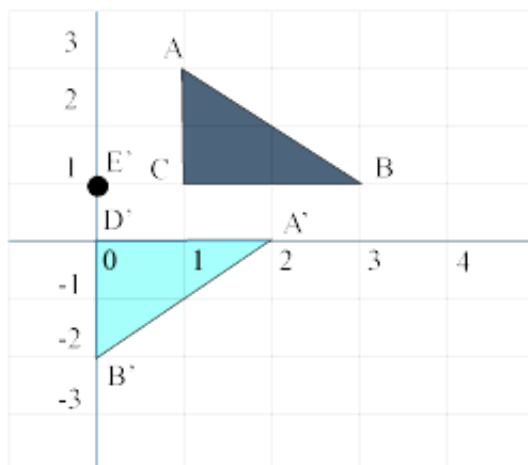
Q.



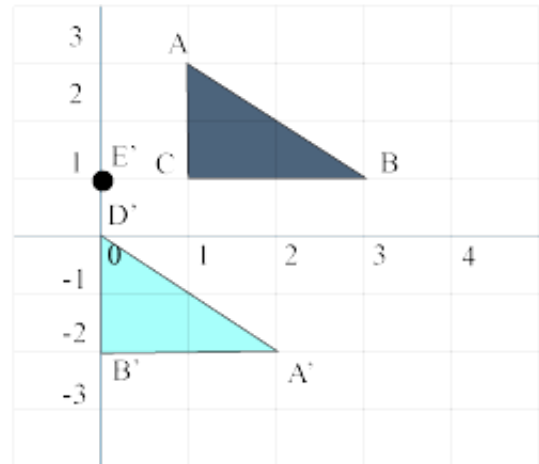
a.



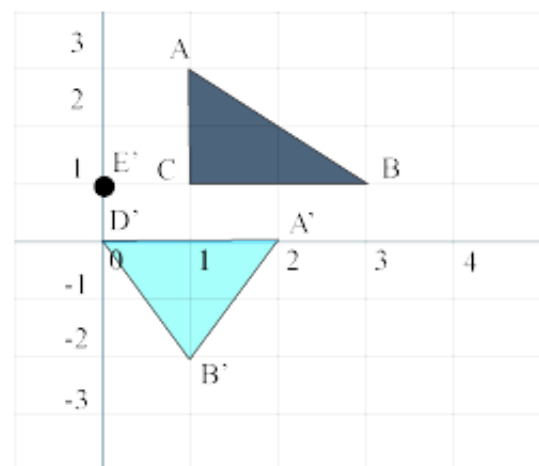
b.



c.



d.



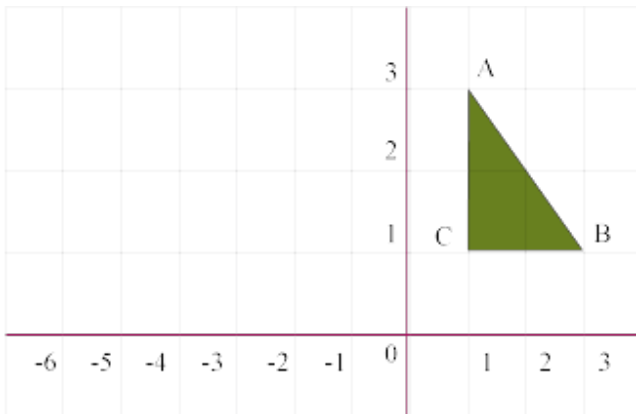
- a
- b
- d
- c

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

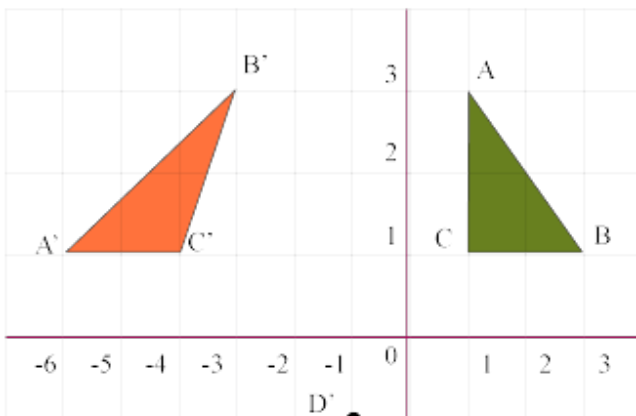


direction about the center $(-1, -1)$

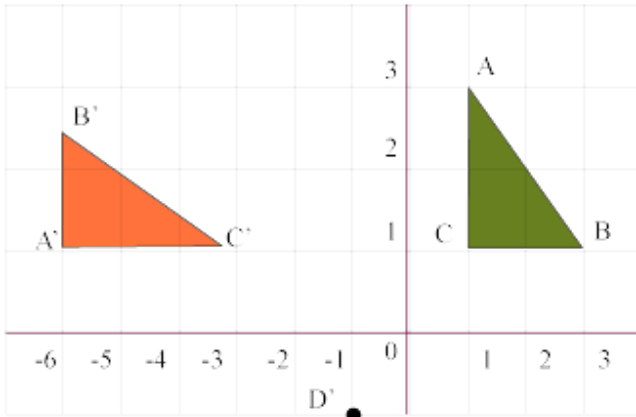
Q.



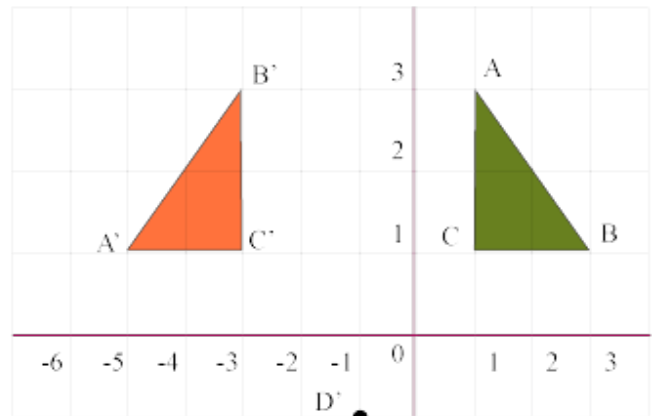
a.



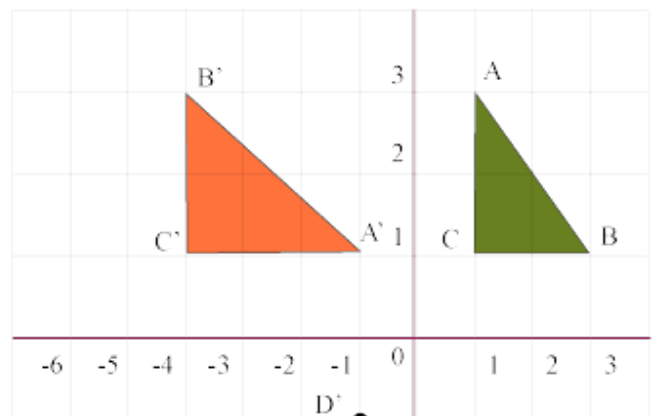
b.



c.



d.

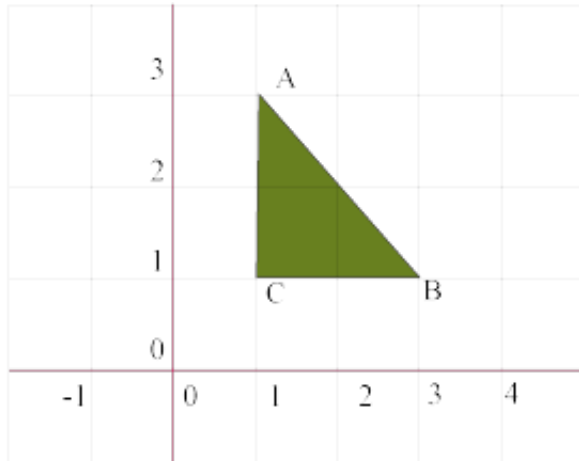


- c
- b
- d
- a

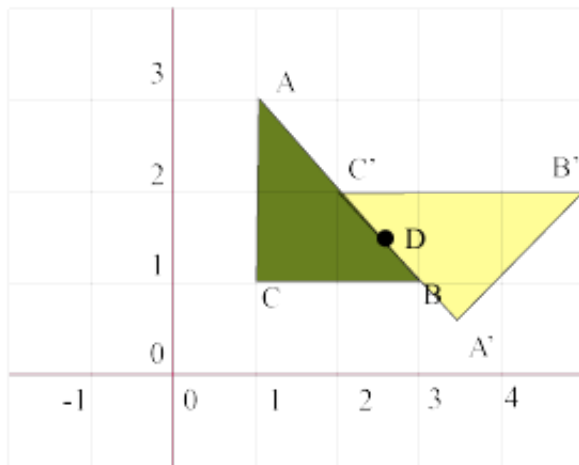
30) Draw the pre-image of the following translations as per the given rule: Rotate 90° clockwise direction about the center $(2, 1)$.



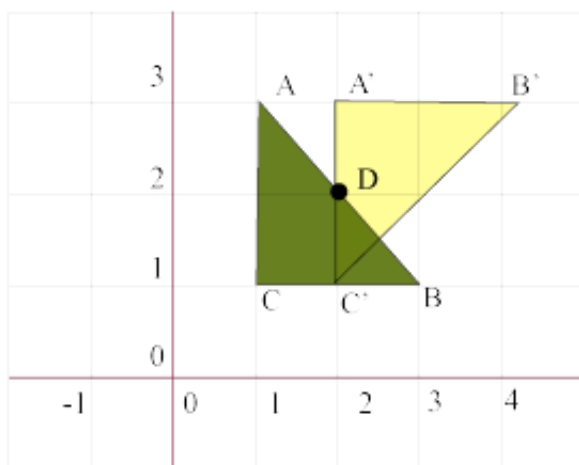
Q.



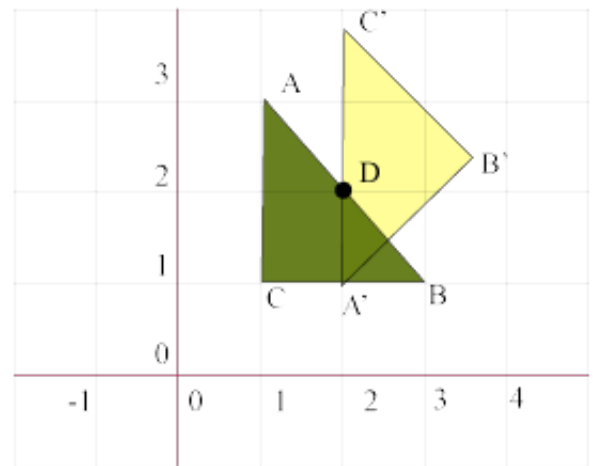
a.



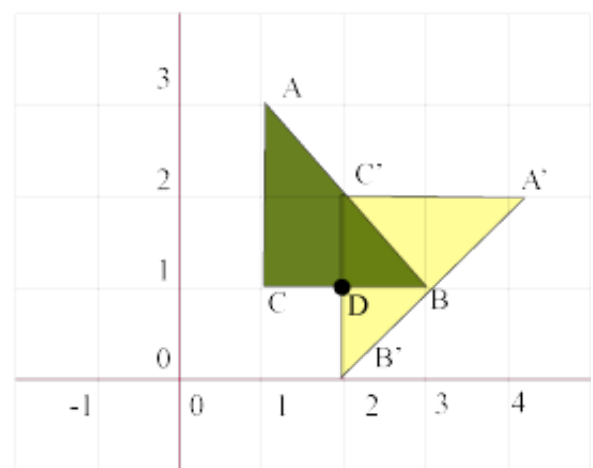
b.



c.



d.



- c
- a
- d
- b