EduSahara™ Assignment

Name : Reflection

Chapter : Symmetry, Reflection and Rotation

Grade : ICSE Grade VIII

1. Find the image of the point $(1,(-1))$ when reflected in x-axis

   (i) $(1,1)$ (ii) $((-1),1)$ (iii) $(2,1)$ (iv) $((-1),(-1))$

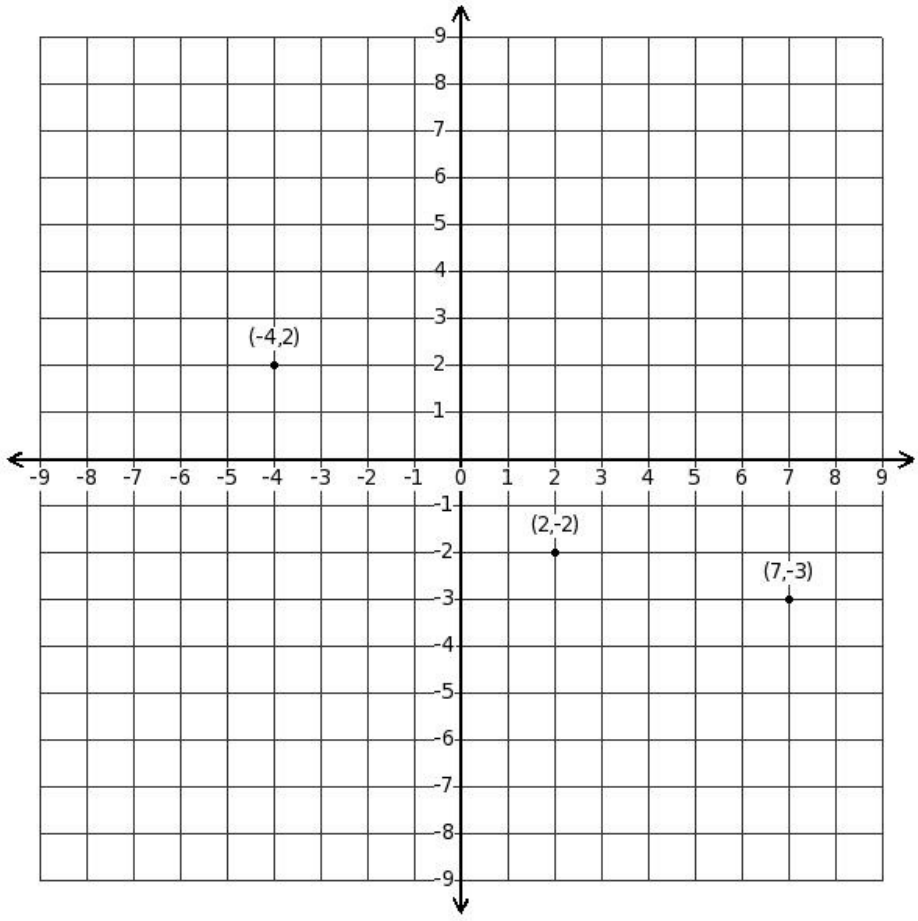
2. Find the image of the point $(6,(-5))$ when reflected in y-axis

   (i) $((-5),(-5))$ (ii) $(6,5)$ (iii) $((-6),(-5))$ (iv) $((-6),5)$ (v) $((-5),(-6))$

3. Find the image of the point $((-4),2)$ when reflected in the origin

   (i) $(4,2)$ (ii) $(5,(-2))$ (iii) $(4,(-2))$ (iv) $((-2),4)$ (v) $((-4),(-2))$

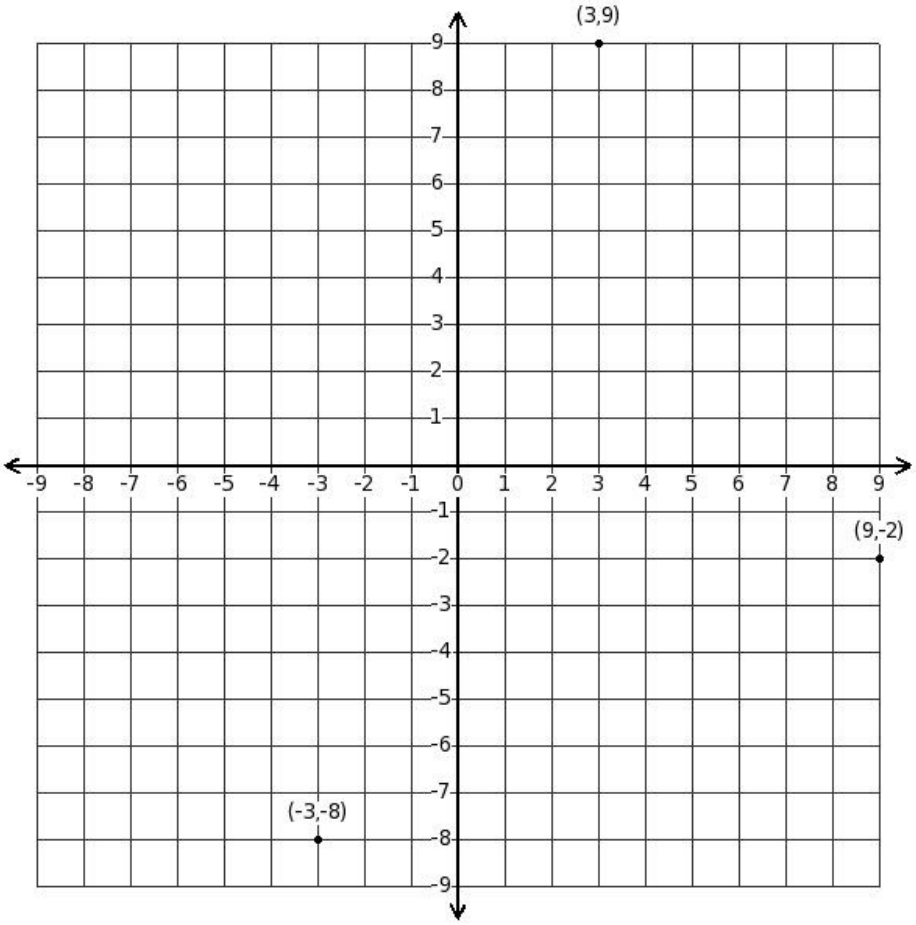
4. Write down the coordinates when reflected in the x-axis



   (i) $((-4),(-2)),(2,2),(7,3)$ (ii) $((-5),(-1)),(2,2),(7,3)$ (iii) $((-4),(-2)),(2,2),(5,1)$

   (iv) $((-4),(-2)),(4,4),(7,3)$ (v) $((-4),(-2)),(2,2),(8,2)$

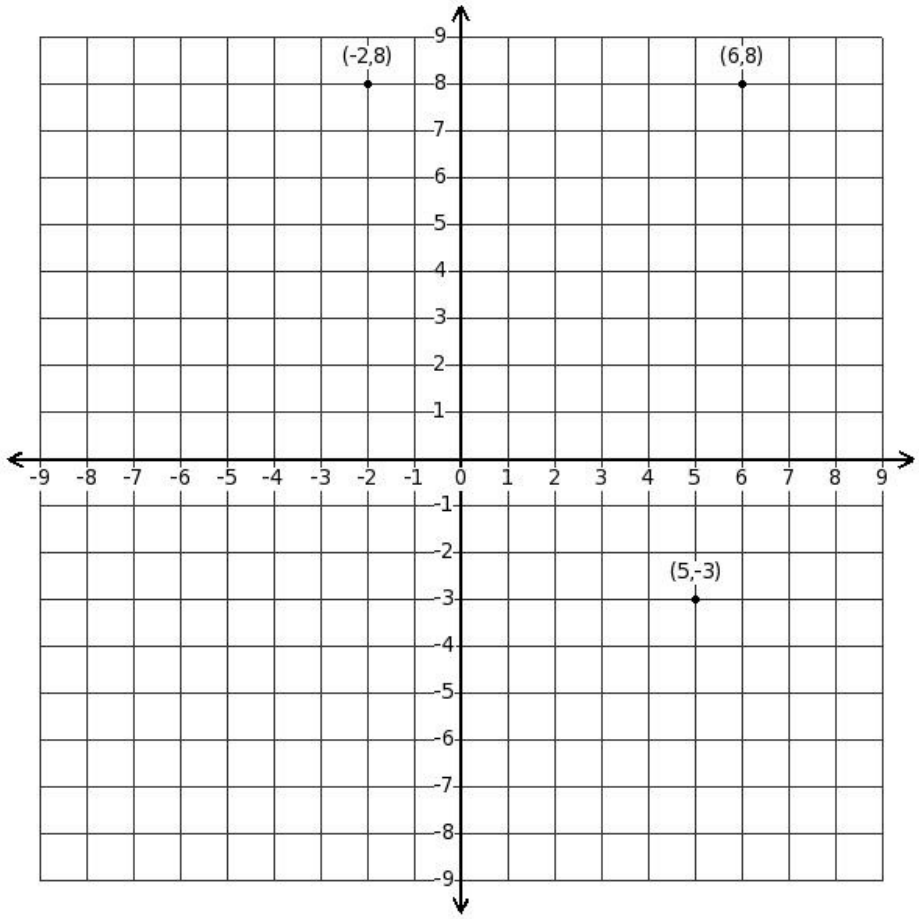
5. Write down the coordinates when reflected in the y-axis



(i) $((-9),(-2)),((-1),11),(3,(-8))$ (ii) $((-10),(-1)),((-3),9),(3,(-8))$

(iii) $((-9),(-2)),((-3),9),(1,(-10))$ (iv) $((-9),(-2)),((-3),9),(3,(-8))$ (v) $((-9),(-2)),((-3),9),(4,(-9))$

6. Write down the coordinates when reflected in the origin



(i) $(2,(-8)),((-4),(-6)),((-5),3)$ (ii) $(2,(-8)),((-6),(-8)),((-4),2)$ (iii) $(1,(-7)),((-6),(-8)),((-5),3)$

(iv) $(2,(-8)),((-6),(-8)),((-7),1)$ (v) $(2,(-8)),((-6),(-8)),((-5),3)$

7. Write down the coordinates when reflected in the x-axis $((-8),1),((-5),(-3)),((-2),4)$

(i) $((-8),(-1)),((-5),3),((-2),(-4))$ (ii) $((-8),(-1)),((-5),3),((-4),(-6))$

(iii) $((-9),0),((-5),3),((-2),(-4))$ (iv) $((-8),(-1)),((-3),5),((-2),(-4))$

(v) $((-8),(-1)),((-5),3),((-1),(-5))$

8. Write down the coordinates when reflected in the y-axis $(7,(-1)),((-2),2),((-7),(-9))$

(i) $((-7),(-1)),(2,2),(8,(-10))$ (ii) $((-8),0),(2,2),(7,(-9))$ (iii) $((-7),(-1)),(2,2),(5,(-11))$

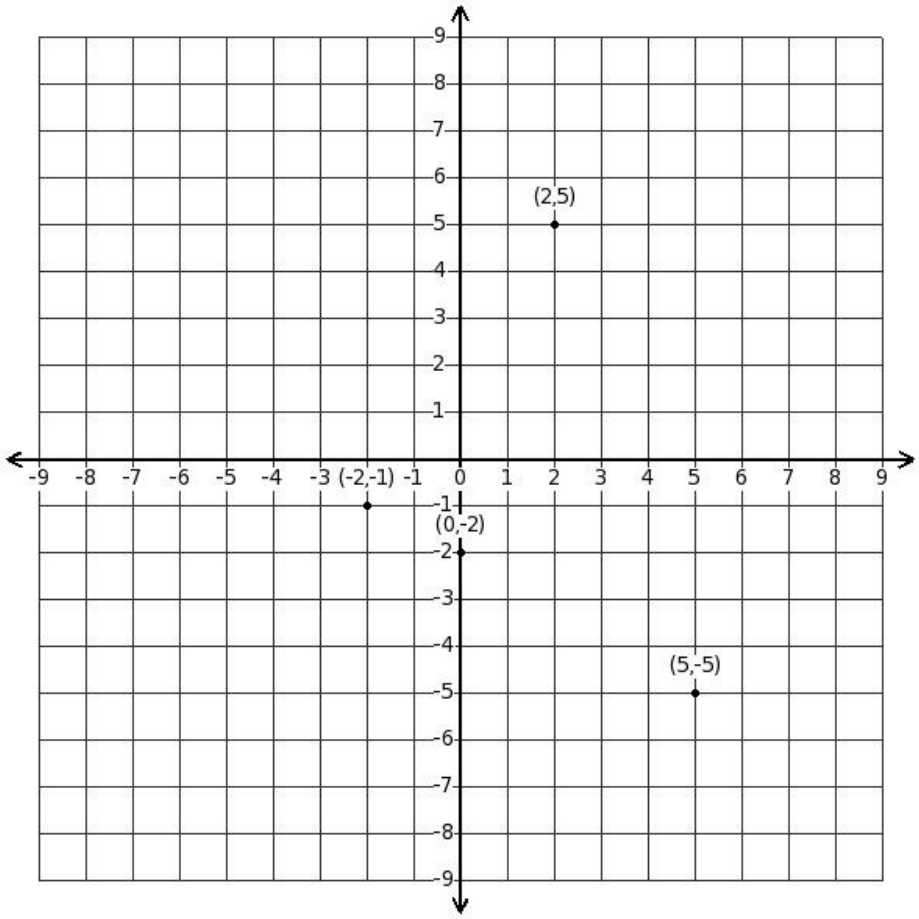
(iv) $((-7),(-1)),(4,4),(7,(-9))$ (v) $((-7),(-1)),(2,2),(7,(-9))$

9. Write down the coordinates when reflected in the origin $((-3),(-5)),((-1),5),(3,(-4))$

(i) $(3,5),(1,(-5)),((-3),4)$ (ii) $(2,6),(1,(-5)),((-3),4)$ (iii) $(3,5),(1,(-5)),((-5),2)$

(iv) $(3,5),(3,(-3)),((-3),4)$ (v) $(3,5),(1,(-5)),((-2),3)$

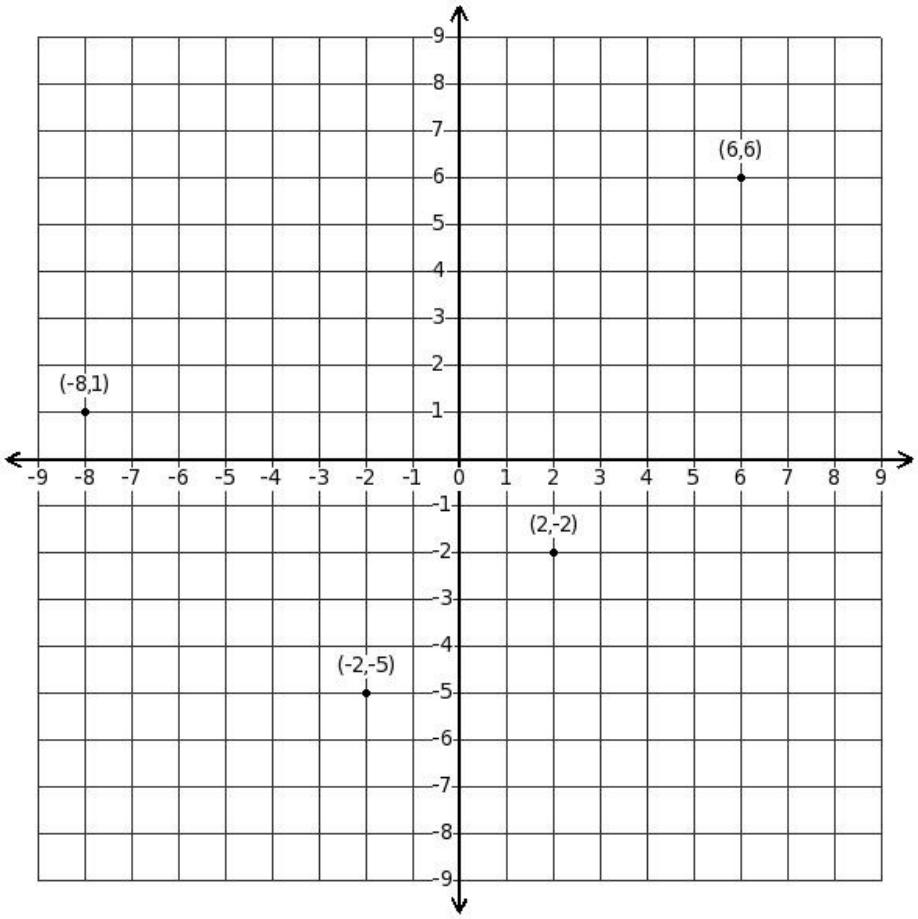
10. Write down the coordinates when reflected in the x-axis



(i) $(2,(-5)),(5,5),((-2),0),((-2),1)$ (ii) $(2,(-5)),(5,5),(1,1),((-2),1)$ (iii) $(2,(-5)),(5,5),(0,2),((-2),1)$

(iv) $(2,(-5)),(5,5),(0,2),((-3),2)$ (v) $(4,(-3)),(5,5),(0,2),((-2),1)$

11. Write down the coordinates when reflected in the y-axis

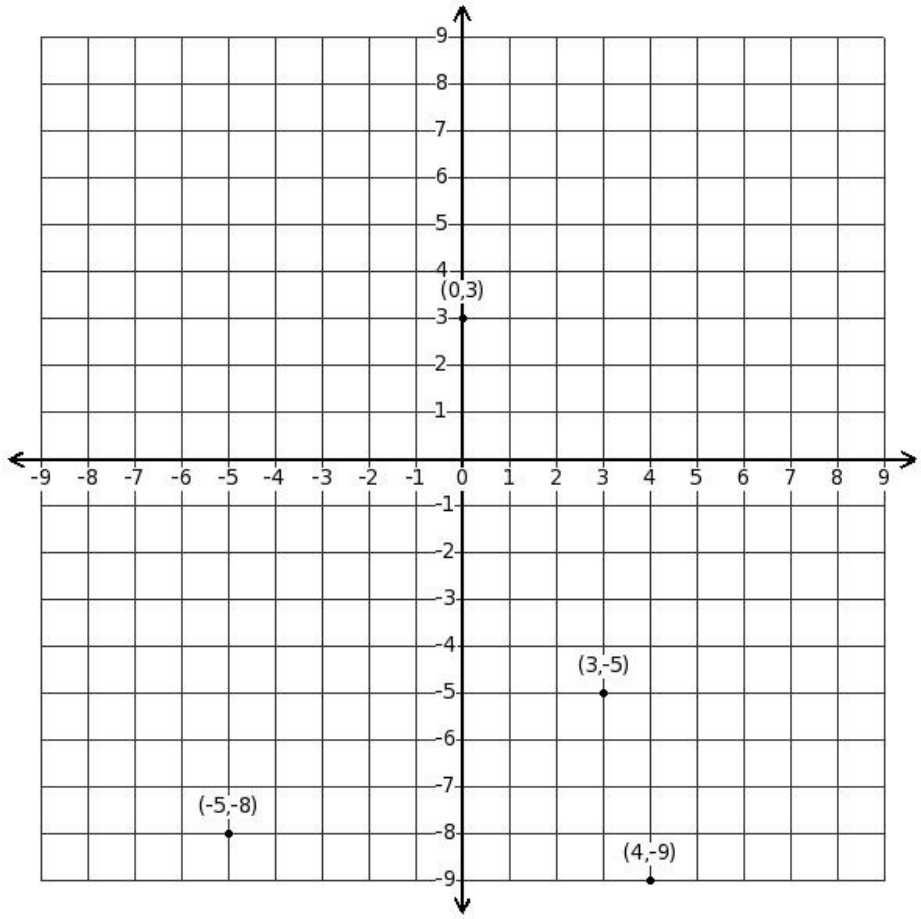


(i) $((-2),(-2)),(8,1),(3,(-6)),((-6),6)$ (ii) $((-2),(-2)),(8,1),(2,(-5)),((-6),6)$

(iii) $(0,0),(8,1),(2,(-5)),((-6),6)$ (iv) $((-2),(-2)),(8,1),(2,(-5)),((-7),7)$

(v) $((-2),(-2)),(8,1),(0,(-7)),((-6),6)$

12. Write down the coordinates when reflected in the origin



(i) $(5,8),(0,(-3)),((-5),3),((-4),9)$ (ii) $(5,8),(0,(-3)),((-3),5),((-4),9)$

(iii) $(7,10),(0,(-3)),((-3),5),((-4),9)$ (iv) $(5,8),(0,(-3)),((-3),5),((-5),10)$

(v) $(5,8),(0,(-3)),((-2),4),((-4),9)$

13. Write down the coordinates when reflected in the x-axis $(1,3),(0,(-7)),((-9),(-2)),(1,(-2))$

(i) $(1,(-3)),(0,7),((-9),2),(0,3)$ (ii) $(1,(-3)),(0,7),((-11),0),(1,2)$ (iii) $(1,(-3)),(0,7),((-8),1),(1,2)$

(iv) $(1,(-3)),(0,7),((-9),2),(1,2)$ (v) $(3,(-1)),(0,7),((-9),2),(1,2)$

14. Write down the coordinates when reflected in the y-axis $((-8),(-7)),(3,(-4)),((-6),(-7)),(8,3)$

(i) $(8,(-7)),((-3),(-4)),(7,(-8)),((-8),3)$ (ii) $(10,(-5)),((-3),(-4)),(6,(-7)),((-8),3)$

(iii) $(8,(-7)),((-3),(-4)),(4,(-9)),((-8),3)$ (iv) $(8,(-7)),((-3),(-4)),(6,(-7)),((-8),3)$

(v) $(8,(-7)),((-3),(-4)),(6,(-7)),((-9),4)$

15. Write down the coordinates when reflected in the origin $((-9),(-8)),(9,1),(4,(-4)),(3,5)$

(i) $(9,8),((-9),(-1)),((-4),4),((-4),(-4))$ (ii) $(11,10),((-9),(-1)),((-4),4),((-3),(-5))$

(iii) $(9,8),((-9),(-1)),((-6),2),((-3),(-5))$ (iv) $(9,8),((-9),(-1)),((-4),4),((-3),(-5))$

(v) $(9,8),((-9),(-1)),((-3),3),((-3),(-5))$

16. Find the coordinates of the reflection of the point $(7,(-4))$ in line $(-7y+28)=0$

(i) $(5,10)$ (ii) $(8,11)$ (iii) $(9,14)$ (iv) $(6,13)$ (v) $(7,12)$

17. Find the coordinates of the reflection of the point $(7,(-5))$ in line $(4x+16)=0$

(i) $((-13),(-3))$ (ii) $((-15),(-5))$ (iii) $((-14),(-6))$ (iv) $((-17),(-7))$ (v) $((-16),(-4))$

18. Which of the following points is invariant under reflection in x-axis

(i) $(6,(-5))$ (ii) $((-7),(-5))$ (iii) $(0,0)$ (iv) $(5,1)$ (v) $((-9),7)$

19. Which of the following points is invariant under reflection in y-axis

(i) $(8,(-2))$ (ii) $((-8),1)$ (iii) $(0,7)$ (iv) $((-4),(-4))$ (v) $(7,6)$

20. Find the image of the point $A((-7),(-4))$ under the reflection of a point $P(0,2)$

(i) $(8,7)$ (ii) $(7,8)$ (iii) $(6,9)$ (iv) $(9,10)$ (v) $(5,6)$

Assignment Key

1) (i)	2) (iii)	3) (iii)	4) (i)	5) (iv)	6) (v)
7) (i)	8) (v)	9) (i)	10) (iii)	11) (ii)	12) (ii)
13) (iv)	14) (iv)	15) (iv)	16) (v)	17) (ii)	18) (iii)
19) (iii)	20) (ii)				