

EduSahara™ Learning Center Assignment**Grade : Class VIII, ICSE****Chapter : Symmetry, Reflection and Rotation****Name : Rotation****Licensed To : Teachers and Students for non-commercial use**

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1. Find the new position of point $(7, 9)$ when rotated through 90° anticlockwise about the origin

(i) $(9, 7)$ (ii) $((-9), (-7))$ (iii) $(7, (-9))$ (iv) $(9, (-7))$ (v) $((-9), 7)$

2. Find the new position of point $((-4), 2)$ when rotated through 90° clockwise about the origin

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

3. Find the new position of point $(8, (-1))$ when rotated through 180° anticlockwise about the origin

(i) $(8, 1)$ (ii) $((-8), 1)$ (iii) $(1, (-8))$ (iv) $(8, (-1))$ (v) $((-8), (-1))$

4. Find the new position of point $(1, (-2))$ when rotated through 180° clockwise about the origin

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

5. Find the image of the triangle formed by $(7, 2)$, $((-3), (-6))$ and $(0, 1)$ when rotated about the origin by 90°

(i) $((-2), 7)$, $(6, (-3))$, $((-3), (-2))$

(ii) $((-3), 8)$, $(6, (-3))$, $((-1), 0)$

(iii) $((-2), 7)$, $(6, (-3))$, $(0, (-1))$

(iv) $((-2), 7)$, $(6, (-3))$, $((-1), 0)$

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

6. Find the image of the triangle formed by $((-8), 3)$, $(0, (-3))$ and

$(4, (-7))$ when rotated about the origin by 180°

- (i) $(8, (-3)), (0, 3), ((-4), 7)$
 - (ii) $(8, (-3)), (0, 3), ((-6), 5)$
 - (iii) $(8, (-3)), (0, 3), ((-3), 6)$
 - (iv) $(8, (-3)), (2, 5), ((-4), 7)$
 - (v) $(7, (-2)), (0, 3), ((-4), 7)$
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7. Find the image of the triangle formed by $((-1), (-7)), ((-8), 2)$ and $(6, (-8))$ when rotated about the origin by 270°

- (i) $((-7), 1), (2, 8), ((-8), (-6))$
 - (ii) $((-8), 2), (2, 8), ((-8), (-6))$
 - (iii) $((-7), 1), (2, 8), ((-10), (-8))$
 - (iv) $((-7), 1), (4, 10), ((-8), (-6))$
 - (v) $((-7), 1), (2, 8), ((-7), (-7))$
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8. Find the image of the rectangle formed by $((-6), (-1)), (2, (-1)), (2, 6)$ and $((-6), 6)$ when rotated about the origin by 90°

- (i) $(1, (-6)), (1, 2), ((-5), 1), ((-6), (-6))$
 - (ii) $(1, (-6)), (1, 2), ((-8), 0), ((-6), (-6))$
 - (iii) $(3, (-4)), (1, 2), ((-6), 2), ((-6), (-6))$
 - (iv) $(1, (-6)), (1, 2), ((-6), 2), ((-7), (-5))$
 - (v) $(1, (-6)), (1, 2), ((-6), 2), ((-6), (-6))$
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9. Find the image of the rectangle formed by $((-5), (-5)), (2, (-5)), (2, (-1))$ and $((-5), (-1))$ when rotated about the origin by 180°

- (i) $(7, 7), ((-2), 5), ((-2), 1), (5, 1)$
- (ii) $(5, 5), ((-2), 5), ((-2), 1), (5, 1)$
- (iii) $(5, 5), ((-2), 5), ((-1), 0), (5, 1)$

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

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

10. Find the image of the rectangle formed by $(-5, -1), (2, -1), (2, 3)$ and $(-5, 3)$ when rotated about the origin by 270°

(i) $(-1, 5), (-1, -2), (3, -2), (3, 5)$

(ii) $(-1, 5), (-1, -2), (4, -3), (3, 5)$

(iii) $(-1, 5), (-1, -2), (1, -4), (3, 5)$

(iv) $(-1, 5), (-1, -2), (3, -2), (2, 6)$

(v) $(1, 7), (-1, -2), (3, -2), (3, 5)$

Assignment Key

- 1) (v)
- 2) (i)
- 3) (ii)
- 4) (iii)
- 5) (iv)
- 6) (i)
- 7) (i)
- 8) (v)
- 9) (ii)
- 10) (i)