

G.CO.A.5: Rotations 1a

- 1 What are the coordinates of A' , the image of $A(-3,4)$, after a rotation of 180° about the origin?
 - 1) $(4,-3)$
 - 2) $(-4,-3)$
 - 3) $(3,4)$
 - 4) $(3,-4)$

- 2 If point $(5,2)$ is rotated counterclockwise 90° about the origin, its image will be point
 - 1) $(2,5)$
 - 2) $(2,-5)$
 - 3) $(-2,5)$
 - 4) $(-5,-2)$

- 3 What are the coordinates of M' , the image of $M(2,4)$, after a counterclockwise rotation of 90° about the origin?
 - 1) $(-2,4)$
 - 2) $(-2,-4)$
 - 3) $(-4,2)$
 - 4) $(-4,-2)$

- 4 What is the image of point $(8,-4)$ under the rotation R_{90° about the origin?
 - 1) $(8,4)$
 - 2) $(4,8)$
 - 3) $(-4,8)$
 - 4) $(-4,-8)$

- 5 The transformation R_{90° maps point $(5,3)$ onto the point whose coordinates are
 - 1) $(5,-3)$
 - 2) $(3,-5)$
 - 3) $(3,5)$
 - 4) $(-3,5)$

- 6 What is the image of $A(5,2)$ under R_{90° ?
 - 1) $(-5,2)$
 - 2) $(5,-2)$
 - 3) $(2,5)$
 - 4) $(-2,5)$

- 7 The coordinates of point P are $(7,1)$. What are the coordinates of the image of P after R_{90° about the origin?
 - 1) $(1,7)$
 - 2) $(-7,-1)$
 - 3) $(1,-7)$
 - 4) $(-1,7)$

- 8 What are the coordinates of the image of $P(-2,5)$ after a clockwise rotation of 90° about the origin?
 - 1) $(-5,-2)$
 - 2) $(-2,-5)$
 - 3) $(2,5)$
 - 4) $(5,2)$

- 9 What are the coordinates of the image of $(2, -5)$ after a counterclockwise rotation of 90° about the origin?
- 1) $(-2, 5)$
 - 2) $(2, 5)$
 - 3) $(-5, -2)$
 - 4) $(5, 2)$
- 10 What is the image of the point $(-3, -6)$ on rotation of 90° about the origin?
- 11 What is the image of the point $(2, -3)$ under a clockwise rotation of 90° (R_{-90°) about the origin?
- 12 The point $(-2, 1)$ is rotated 180° about the origin in a clockwise direction. What are the coordinates of its image?
- 13 What is the image of $R_{90^\circ}(1, 2)$?
- 14 Write the coordinates of P' , the image of $P(5, -1)$ after a clockwise rotation of 180° about the origin.
- 15 What is the image of $(5, 1)$ under a counterclockwise rotation of 90° ?
- 16 The point $(-3, 4)$ is rotated 180° about the origin in a counterclockwise direction. What are the coordinates of its image?
- 17 What is the image of $(6, 5)$ under a counterclockwise rotation of 180° ?
- 18 Point A is rotated 180° in a counterclockwise direction about the origin. If the coordinates of A are $(-1, 3)$, what are the coordinates of A' , its image?
- 19 If point $P(3, -2)$ is rotated 90° about the origin, what is the image of P ?
- 20 The coordinates of the endpoints of \overline{BC} are $B(5, 1)$ and $C(-3, -2)$. Under the transformation R_{90° , the image of \overline{BC} is $\overline{B'C'}$. State the coordinates of points B' and C' .

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Answer Section

- 1 ANS: 4
 $(x,y) \rightarrow (-x,-y)$
- REF: 061304ge
- 2 ANS: 3 REF: 060809b
- 3 ANS: 3 REF: 088534siii
- 4 ANS: 2 REF: 010435siii
- 5 ANS: 4 REF: 089421siii
- 6 ANS: 4 REF: 019727siii
- 7 ANS: 4 REF: 011421ge
- 8 ANS: 4 REF: 019934siii
- 9 ANS: 4 REF: 080328siii
- 10 ANS:
 $(6,-3)$
- REF: 068016siii
- 11 ANS:
 $(-3,-2)$
- REF: 068109siii
- 12 ANS:
 $(2,-1)$
- REF: 068703siii
- 13 ANS:
 $(-2,1)$
- REF: 089308siii
- 14 ANS:
 $(-5,1)$
- REF: 018905siii
- 15 ANS:
 $(-1,5)$
- REF: 068910siii
- 16 ANS:
 $(3,-4)$
- REF: 069605siii
- 17 ANS:
 $(-6,-5)$
- REF: 089812siii

18 ANS:
(1,-3)

REF: 089908siii

19 ANS:
(2,3)

REF: 080109siii

20 ANS:
 $(x,y) \rightarrow (-y,x)$
 $B(5,1) \rightarrow B'(-1,5)$
 $C(-3,-2) \rightarrow C'(2,-3)$

REF: 061429ge