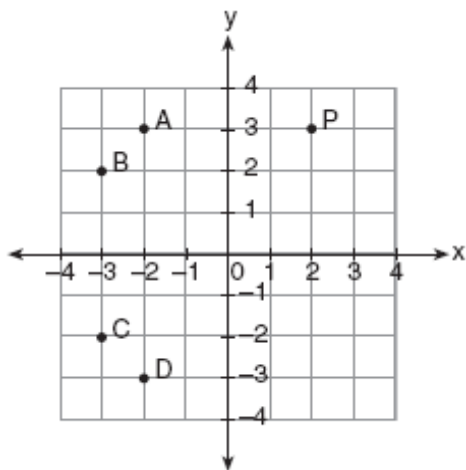


NAME: _____

1. 010418a, P.I. G.G.61

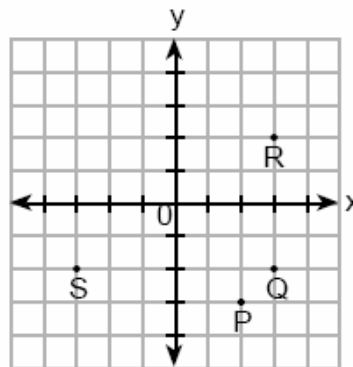
In the accompanying graph, if point P has coordinates (a,b) , which point has coordinates $(-b,a)$?



- [A] D [B] C [C] A [D] B

2. 069908a, P.I. G.G.61

If $x = -3$ and $y = 2$, which point on the accompanying graph represents $(-x, -y)$?



- [A] R [B] Q [C] S [D] P

3. 060809b, P.I. G.G.54

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

- [A] $(-5, -2)$ [B] $(-2, 5)$
[C] $(2, -5)$ [D] $(2, 5)$

NAME: _____

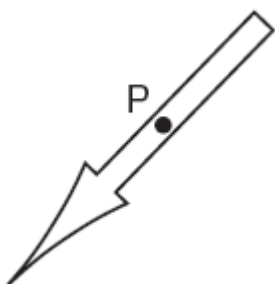
4. 080721a, P.I. G.G.54

The accompanying diagram shows the starting position of the spinner on a board game.



How does this spinner appear after a 270° counterclockwise rotation about point P ?

[A]



[B]



[C]

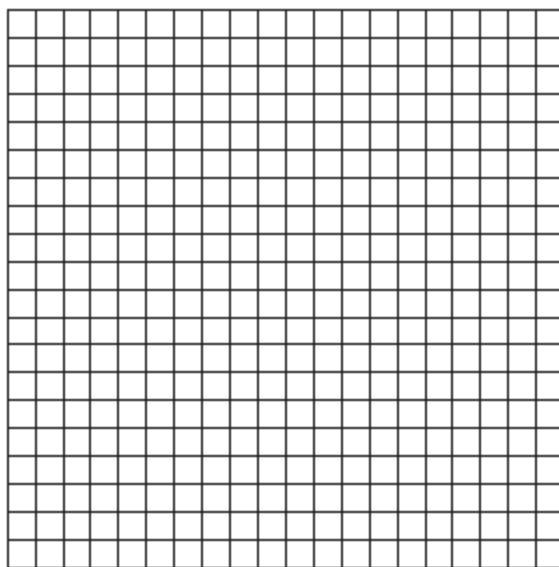


[D]



5. 080937ge, P.I. G.G.55

Triangle DEG has the coordinates $D(1,1)$, $E(5,1)$, and $G(5,4)$. Triangle DEG is rotated 90° about the origin to form $\triangle D'E'G'$. On the grid below, graph and label $\triangle DEG$ and $\triangle D'E'G'$. State the coordinates of the vertices D' , E' , and G' . Justify that this transformation preserves distance.



[1] D _____

[2] B _____

[3] B _____

[4] C _____

[4] $D'(-1,1)$, $E'(-1,5)$, $G'(-4,5)$, $\triangle DEG$ and $\triangle D'E'G'$ are graphed and labeled correctly, and an appropriate justification is given, such as showing congruent segments or stating that all rotations preserve distance.

[3] Appropriate work is shown, but one computational, graphing, or labeling error is made.

or [3] Appropriate work is shown, but no justification is given.

or [3] Appropriate work is shown, but the coordinates are not stated or are stated incorrectly.

[2] Appropriate work is shown, but one computational, graphing, or labeling error is made, and no justification is given.

or [2] Appropriate work is shown, but two or more computational, graphing, or labeling errors are made.

or [2] Appropriate work is shown, but one conceptual error is made.

or [2] Both triangles are graphed and labeled correctly, but no further correct work is shown.

[1] Appropriate work is shown, but one conceptual error and one computational, graphing, or labeling error are made.

or [1] Both triangles are graphed correctly, but no further correct work is shown.

or [1] $D'(-1,1)$, $E'(-1,5)$, $G'(-4,5)$, but no work is shown.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[5] incorrect procedure. _____