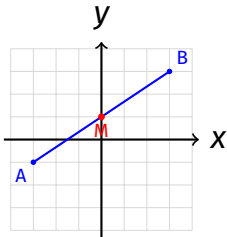


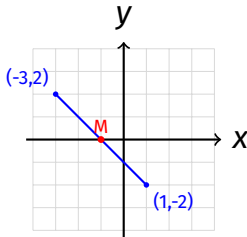
Build Tasks - Coordinates



Find the midpoint or gradient of a segment between two coordinates.



1. What is the midpoint of $A(-3,-1)$ and $B(3,3)$?

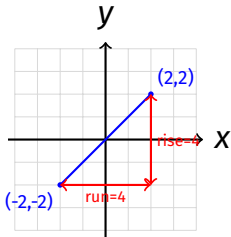


2. What is the midpoint of $(-3,2)$ and $(1,-2)$?

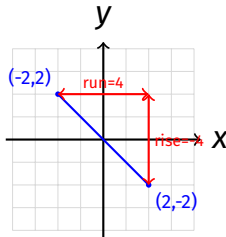
Build Tasks - Coordinates



Find the midpoint or gradient of a segment between two coordinates.



3. What is the gradient between $(-2, -2)$ and $(2, 2)$?

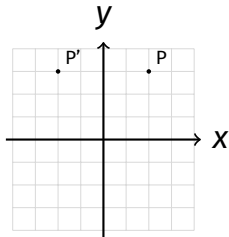


4. What is the gradient from $(-2, 2)$ to $(2, -2)$?

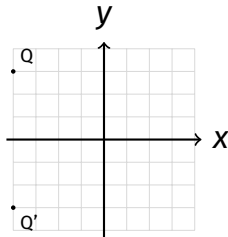
Build Tasks - Coordinates



Reflect or translate a point, and describe the transformation rule.



- 5. $P=(2,3)$ is reflected in the y -axis.
Find P' .**

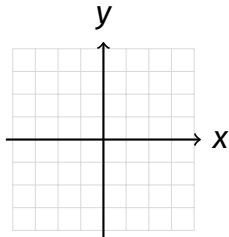


- 6. $Q=(-4,3)$ is reflected in the x -axis.
Find Q' .**

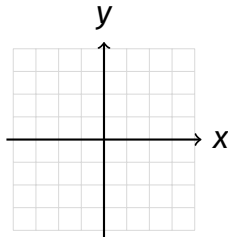
Build Tasks - Coordinates



Reflect or translate a point, and describe the transformation rule.



- 7. Plot triangle $(1,1),(4,1),(4,3)$.
Reflect it in the y -axis.**

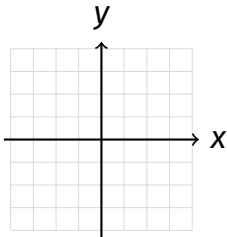


- 8. Translate $(3,2)$ by 2 right and 1 down. New point?**

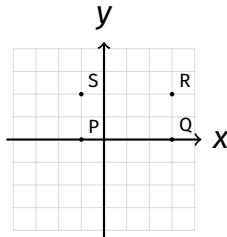
Build Tasks - Coordinates



Apply coordinate reasoning to a shape or a reversed transformation.



9. A point is translated 4 right and 3 down to land on (2,1). What was the original point?

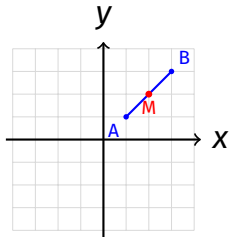


10. P,Q,R,S are four vertices. What shape do they form?

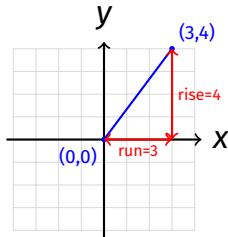
Build Tasks - Coordinates



Apply coordinate reasoning to a shape or a reversed transformation.



11. What is the midpoint of A(1,1) and B(3,3)?



12. Find the gradient of the line from (0,0) to (3,4) as a fraction.