

Core Content

Cluster Title: Use coordinates to prove simple geometric theorems algebraically.
Standard G.GPE.6: Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
Concepts and Skills to Master
<ul style="list-style-type: none"> Use coordinate geometry to divide a segment into a given ratio.

Supports for Teachers

Critical Background Knowledge	
Academic Vocabulary	
coordinates, $a:b$ ratio, directed line segment	
Suggested Instructional Strategies	Resources
Sample Formative Assessment Tasks	
<p>Skill-Based Task: A segment with endpoints $A(3,2)$ and $B(6,11)$ is partitioned by a point C such that AC and CB form a 2:1 ratio. Find C.</p>	<p>Problem Task: A point $B(4,2)$ on a segment with endpoints $A(2, -1)$ and $C(x,y)$ partitions the segment in a 1:3 ratio. Find x and y.</p>