

GRAVITY CENTER DECISION MAKING

The Metropolis Public Library plans to expand with its first major branch library in the city's growing north side. The branch will serve six census tracts. Here are the coordinates of each tract and the population within it:

CENSUS TRACT	CENTER OF TRACT	POPULATION IN TRACT
503—Logan Square	(3, 4)	45,000
519—Albany Park	(4, 5)	25,000
522—Rogers Park	(3, 6)	62,000
538—Kentwood	(4, 7)	51,000
540—Roosevelt	(2, 3)	32,000
561—Western	(5, 2)	29,000

Using the center-of-gravity method, what should be the coordinate location of the branch library?