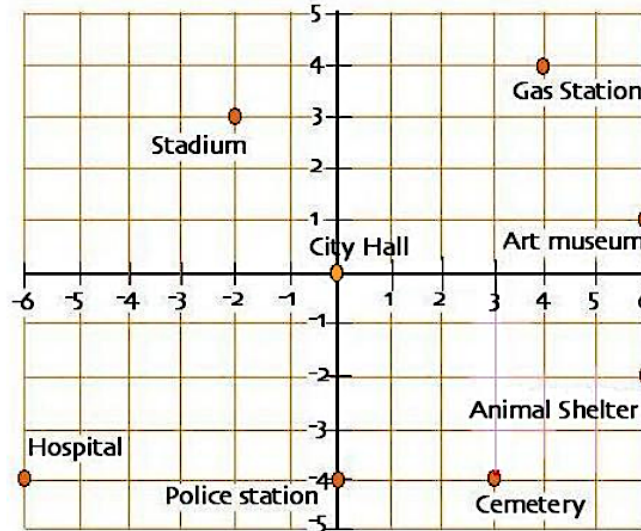


Distance on the Coordinate Plane

Use the drawing of the city to help you answer questions 1-7.

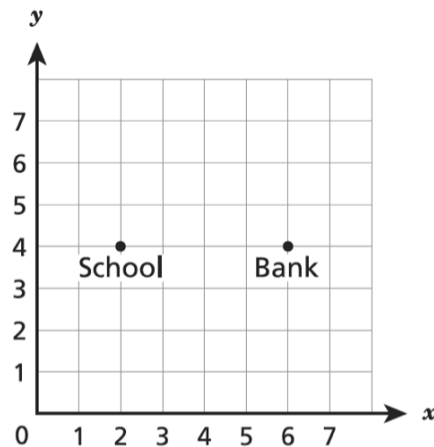


1. What is the location of **city hall**? What is the location of the **police station**? How many blocks apart are these two buildings?
2. What is the location of the **art museum**? What is the location of the **animal shelter**? How many blocks apart are these two buildings?
3. What is the location of the **hospital**? What is the location of the **cemetery**? How many blocks apart are these two buildings?
4. What is the location of the **hospital**? What is the location of the **police station**? How many blocks apart are these two buildings?
5. The **police station** is being moved to its new location located at $(-6, -1)$. Is the police station closer to, farther away from, or the same distance from the **hospital**?

6. The **art museum** and the **animal shelter** are moving as well. Their movement can be described as a reflection across the y -axis. What are the coordinates of the new location for the **art museum** and the **animal shelter**? How many blocks are they from each other? Is this the same distance as in question 2? Why or why not?
7. The **stadium** is also being moved. Its new location can be described as a reflection across the x -axis. What is the new location of the stadium? How many blocks is the new stadium from the old stadium?

Assess Your Understanding

Mark graphed points on the coordinate plane below to represent the locations of his school and a bank.



Mark wants to add the location of the library on the coordinate plane. The distance from the library to the school is the same as the distance from the bank to the school. Which ordered pair could be the coordinates of the library?

- A (2, 4)
- B (2, 8)
- C (4, 4)
- D (6, 8)