Name _____

Solve Systems of Linear Equations by Graphing

Learning Goal

I can write linear systems to model real-world problems and solve them by graphing.

Rate yourself on this learning goal:

◯ **I don't understand.**   ◯ **I need more practice.**   ◯ **I've got it.**

⚡ Spark Your Learning

Raul wonders whether he should take a taxi or use a ridesharing service. The cost of the taxi includes a base fare of $2.50 and $0.50 per 0.2 mile. The cost of the ridesharing service includes a base fare of $4.50 and $1.50 per mile.

How does the length of Raul's trip affect which option he should choose?

Show your thinking.

> **TAXI**
> Cost = base fare + charge per partial mile

> **RIDESHARING SERVICE**
> Cost = base fare + charge per full mile

Turn & Talk If you graph the equations representing the costs of the taxi and ridesharing service as a function of trip distance, what appears to be the intersection point? What does this point represent, and how can you verify its coordinates?