Info Gap: Racing and Play Tickets

Problem Card 1

Priya and Lin are having a race. The equation $y = 9.5x$ represents one person's progress.

If one of them had a head start, how long is it until the other person catches up?

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Data Card 1

- The equation $y = 9.5x$ represents Lin's progress, where y is her distance, in feet, from the starting line, and $x$is the time, in seconds, that she has been running.
- Priya had the head start. She was 18 feet in front of the starting line when Lin started.
- Priya runs at a constant 8 feet per second.

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Problem Card 2

A school sells adult tickets and student tickets for the drama play. One equation that represents the situation is $x + y = 115$.

How many of each type of ticket did they sell?

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Data Card 2

- The equation $x + y = 115$ represents how many tickets were sold, where x is student tickets and y is adult tickets.
  This equation is equivalent to $x = 115 - y$.
- Adult tickets cost $8 each.
- Student tickets cost $3 each.
- The school made $720 total from ticket sales.

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