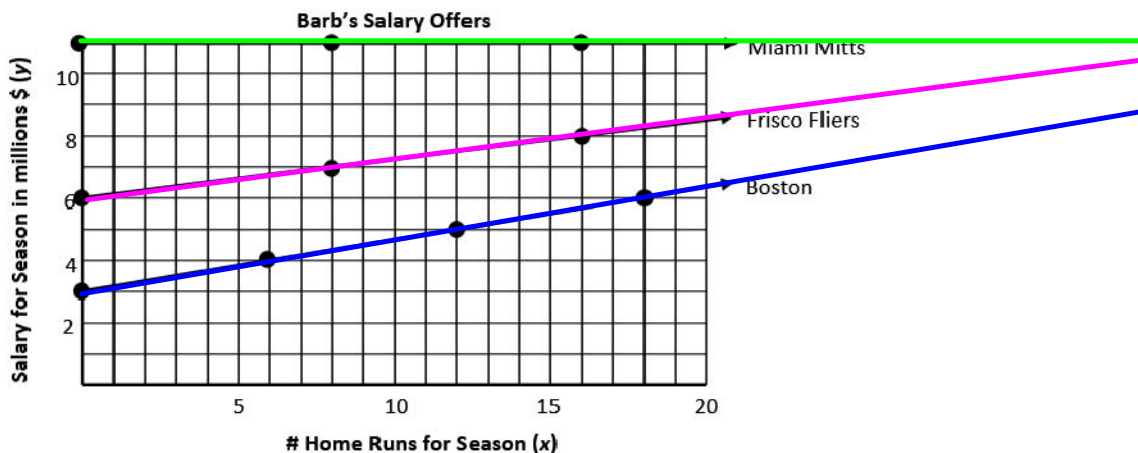


When answering this performance task, be sure to keep in mind these things:

- Show all work in a neat and **organized** manner
- Explain your answers in complete sentences. **Be thorough with your explanation.**

Barb Barbosa, the greatest home run hitter in women's softball, needs your help. Three teams have made her offers - the Miami Mitts, the Frisco Fliers, and the Boston Bombs – but she doesn't know which offer to accept. Barb's agent has made a graph showing her what each team is offering. Barb needs your help because the graph only goes up to 20 home runs and she thinks she can hit more than that.



- Use the graph to write an equation for each team's offer.

Let  $x$  = the number of home runs Barb hits during the season.

Let  $y$  = Barb's total salary for the season

Equation for Miami Mitts:

$$y = 11$$

Equation for Frisco Fliers:

$$y = \frac{1}{8}x + 6$$

Equation for Boston Bombs:

$$y = \frac{1}{6}x + 3$$

- Use your equations to help Barb decide which offer to accept. Show your work clearly and carefully explain to Barb how to choose her team!

When, **exactly**, is it best to choose the **Miami Mitts**?

If hit less than 40 homeruns, then Barb should choose Miami Mitts.

When, **exactly**, is it best to choose the **Frisco Fliers**?

If hit between 40 homeruns and 72 homeruns, then Barb should choose Frisco Fliers.

When, **exactly**, is it best to choose the **Boston Bombs**?

If hit more than 72 homeruns, then Barb should choose Boston Bombs.