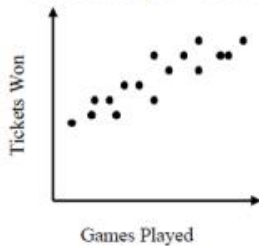


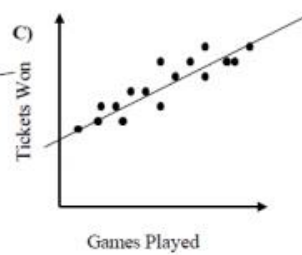
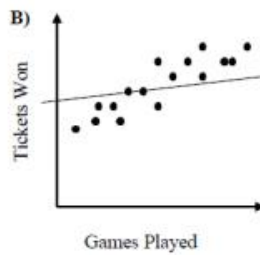
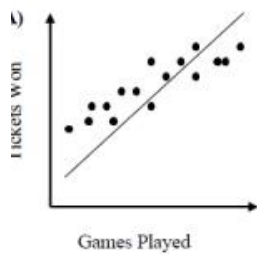
Lines of Best Fit

1. Multiple Choice.

The scatterplot below shows the relationship between games played and tickets won.

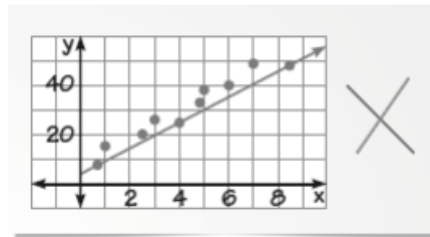


Which of the graphs below represents the line of best fit?



2.

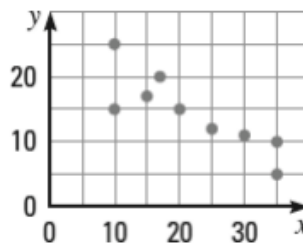
ERROR ANALYSIS The graph shows one student's approximation of the best-fitting line for the data in the scatter plot. Describe and correct the error in the student's work.



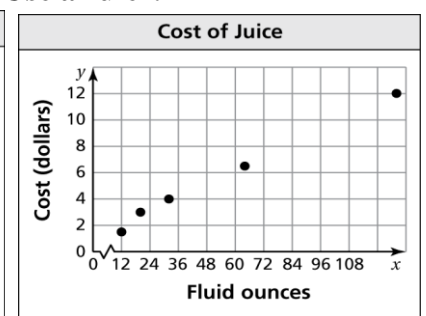
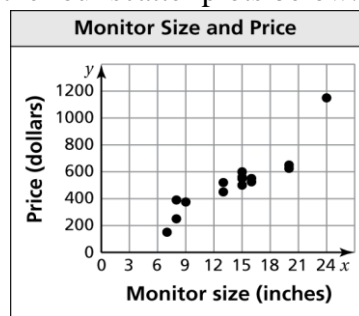
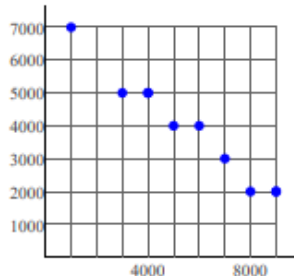
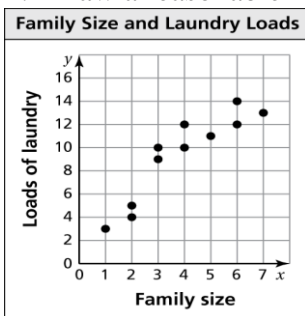
3.

MULTIPLE CHOICE Which equation best models the data in the scatter plot?

- Ⓐ $y = 15$ Ⓑ $y = -\frac{1}{2}x + 26$
 Ⓒ $y = -\frac{2}{5}x + 19$ Ⓓ $y = -\frac{4}{5}x + 33$



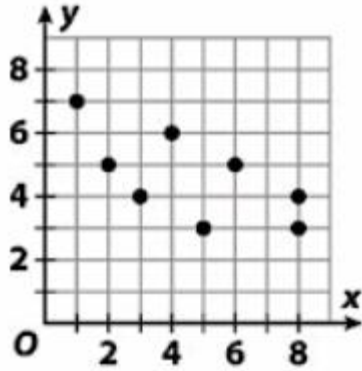
4. Draw a reasonable **line of best fit** on each one of the four scatter plots below. **Use a ruler.**



Directions for #6-8 Draw a line of fit for each scatter plot given. Then use two points from your line to write the equation for the line. Use your line to make a prediction.

6.

Draw reasonable **line of best fit**. Use a ruler.

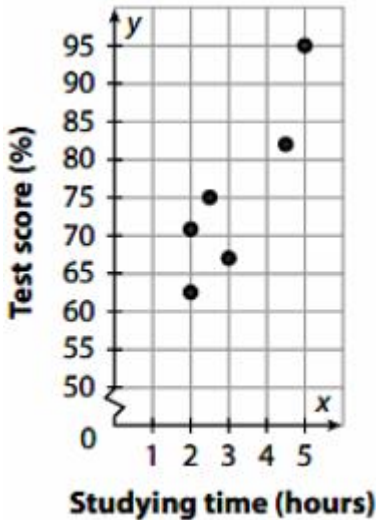


Equation of line used:

Find the value of y when $x=10$ using your line.

7.

Draw reasonable **line of best fit**. Use a ruler.

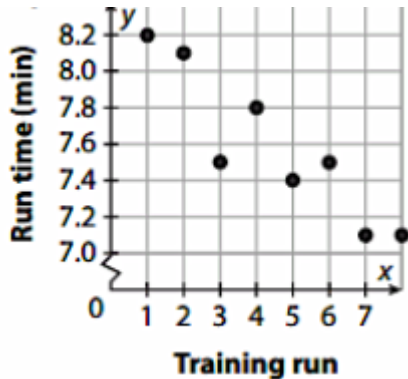


Equation of line used:

Find the approximate score (using your line) for a student who studied **4 hours**.

8.

Draw reasonable **line of best fit**. Use a ruler.



Equation of line used:

If this trend continued, what would you expect the runtime to be for the **9th training run**? Explain **why** or **why not** this is related to the line of best fit.