Fitted = Predicted

Is linear model appropriate? Explain.

No, because the residuals plot has a pattern.
Is linear model appropriate? Explain.

Yes, bec. resid plot is a random scatter.
Is the model accurate (or efficient) if: Explain

(a) \( R^2 = 89.0 \%
Yes, bec. 89% of the variability in heart rate can be explained by the linear model.

(b) \( r = 0.5 \rightarrow R^2 = (0.5)^2 = 0.25
No, bec. only 25% of the variability in heart rate can be explained by the linear model.
Find the actual value for a predicted value of 10.

\[ \text{Resid} = y - \hat{y} \]

\[ 4 = y - 10 \]

\[ y = 14 \]