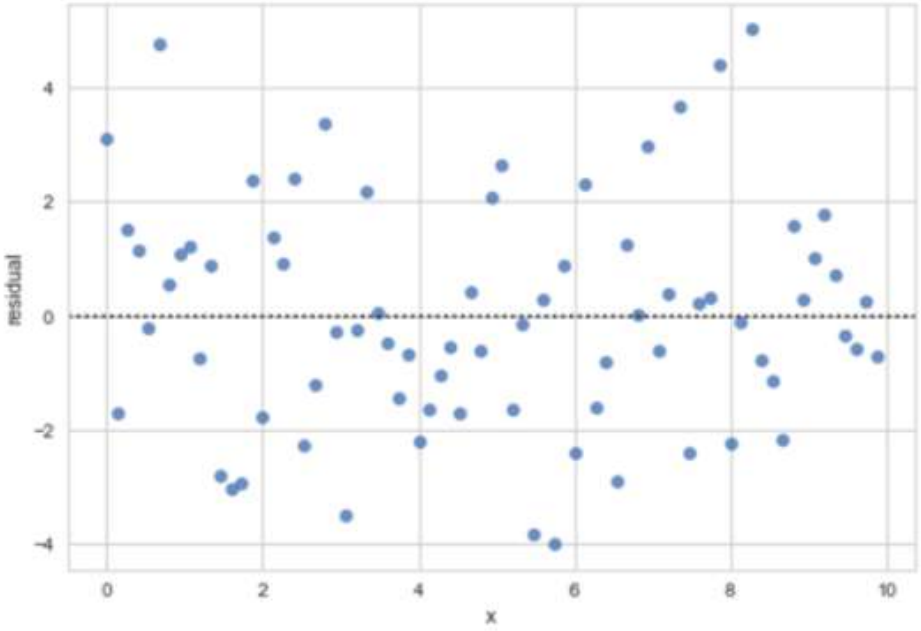
1. Consider the following lines of code. What is the name of the column that contains the target values? 1 point

```
from sklearn.linear_model import LinearRegression lm=LinearRegression()

X = df[['highway-mpg']]

Y = df['price']

lm.fit(X, Y)

Yhat=lm.predict(X)
```

- ○ Yhat
- ○ 'highway-mpg'
- ○ fit
- ◉ 'price'

2. Consider the following **Residual Plot**. Which of the following is a correct interpretation?



- ○ Since the values are distributed uniformly around a straight line, the linear model is a good fit.
- ○ Since the values are randomly distributed on the graph, it indicates the linear model is not a good fit.
- ◉ Since the number of values above the line is the same as the number below the line, it indicates the linear model is not a good fit.

3. Which statement is most accurate about a higher-order polynomial model than a linear one? 1 point

- ○ When you compare their R^2 values, the smaller value indicates the better fit.
- ○ When you compare their R^2 values, the larger value indicates the better fit.
- ○ The linear model will usually appear to fit the data better.
- ◉ You cannot compare their R^2 values to decide which is a better fit.

4. Consider the following lines of code. What value does the variable **out** contain? 1 point

```
lm = LinearRegression()

X = df[['highway-mpg']]

Y = df['price']

lm.fit(X, Y)

out=lm.score(X,Y)
```

- ◉ The Coefficient of Determination
- ○ Mean Squared Error with respect to X
- ○ A multiple linear regression
- ○ Mean Square Error with respect to y.