1. What does the following line of code do? 1 point

```
lm = LinearRegression()
```

- (●) Creates a linear regression object and stores it in the **lm** variable.
- ( ) Assigns a linear regression model to the lm variable.
- ( ) Fits a regression object to the variable lm.
- ( ) Predicts output values of a linear regression object.

2. What steps do the following lines of code perform? 1 point

```
Input=[('scale',StandardScaler()),('model',LinearRegression())]
pipe=Pipeline(Input)

pipe.fit(Z,y)

ypipe=pipe.predict(Z)
```

- ( ) Calculates the Coefficient of Determination
- ( ) Finds the correlation between **Z** and **y**
- (●) Performs a prediction using a linear regression model
- ( ) Performs a polynomial transform on the features **Z**

3. What is the order of a polynomial created with this code? 1 point

```
Pr = PolynomialFeatures(degree=2)
```

- ○ A minimum of 2
- ○ Between 0 and 2, inclusive
- ◉ A maximum of 2
- ○ 2

4. Which statement about $\mathbf{R^2}$, the coefficient of determination, is true? 1 point

- ◉ Its value can be between 0 and 1 inclusive.
- ○ Its value can be either 0 or 1.
- ○ Its value can be any positive number.
- ○ Its value can be in the range of -1 to 1, inclusive.

5. Consider the following equation: 1 p

$$y = b_0 + b_1 x$$

The variable y is _____?

- ○ The predictor or independent variable
- ○ The intercept
- ○ The degree of the polynomial
- ◉ The target or dependent variable