**Simple Regression**. The European Engine Company (EEC) is a multi-national manufacturer of small gasoline and diesel motors. EEC has estimated the following cost experience for a new 3.5 hp engine over a sample of 122 observations:

COST = $8,500 + $32 OUTPUT

|  |  |  |  |
| --- | --- | --- | --- |
| Predictor | Coef | Stdev | t ratio |
| Constant | 8,500 | 5,000 | 1.7 |
| OUTPUT | 32 | 8 | 4.0 |
|  |  |  |  |
| SEE = $2,500 | R2 = 75% | = 74.8% | F statistic = 360 |

where COST is the dependent Y variable and OUTPUT is the independent X-variable.

|  |  |
| --- | --- |
| A. | Fully interpret these simple regression results. |
| B. | Describe this cost category as fixed or variable based upon the simple regression results described previously |