AP Statistics
The top 10 phrases that pay

Bracketed words/phrases indicate that a choice of one of them is needed
Underlined words/phrases indicate that context is needed (substitute the actual variable(s) from the problem)

Phrases 1 – 5 : linear regression

① correlation between 2 quantitative variables (r):
" There is a [weak / moderate / strong] [positive / negative] linear relationship between explanatory variable and response variable."

② slope of the LSRL (b):
" For every 1 unit increase in the explanatory variable, our model predicts an average increase of b units in the response variable."

③ y-intercept of the LSRL (a):
" If explanatory variable = 0 units, this model predicts a response variable value of a units." *(be prepared to comment on whether this value makes any sense)*

④ standard deviation of residuals (s):
"If we use this model to predict the values of response variable from explanatory variable, our predictions will typically be off by about s units.

⑤ coefficient of determination (r^2):
"r^2 percent of the variation in response variable can be accounted for by/explained by the linear model with x = explanatory variable."

Phrases 6 – 7 : confidence intervals

⑥ confidence interval:
" I am confidence level% confident that the true [proportion / mean /difference of proportions/ difference of means/ slope]
[in context] is between lower bound and upper bound."

- or -

" I am confidence level% confident that the interval from lower bound to upper bound captures the true [proportion / mean /difference of proportions/ difference of means/ slope] [in context]."

⑦ confidence level:
" If the [random sampling / random assignment] were repeated many times, about confidence level% of the resulting confidence intervals would contain the true
[proportion / mean /difference of proportions/ difference of means/ slope] [in context]."

Phrases 8 – 10: significance tests

⑧ meaning of the *p-value*:
"There is a *p-value*% probability of getting a result as extreme or more extreme than the one observed if the null hypothesis is true."

⑨ decision in a significance test:
"Since the p-value of *p-value* is [less than / greater than] α = significance level,
[reject / fail to reject] H_0. We [have / don't have] convincing evidence that the alternative hypothesis in context."

⑩ Type I and Type II errors:
"The probability of avoiding a Type II error is power when the true [proportion / mean /difference of proportions/ difference of means/ slope] [in context] is _____."