Handout 14: Interpret the slope and intercept of regression model with categorical predictors

```
round(summary(lm(wages~race+education+I(age-25), data=earnings))$coef,2)
```

```
##                            Estimate Std. Error t value Pr(>|t|)
## (Intercept)                   12.06       0.16   74.41     0.00
## raceBlack                     -3.82       0.13  -30.32     0.00
## raceLatino                    -1.92       0.11  -17.24     0.00
## raceAsian                      0.68       0.16    4.23     0.00
## raceIndigenous                -1.41       0.33   -4.32     0.00
## raceOther/Multiple            -0.62       0.31   -2.02     0.04
## educationHS Diploma            3.97       0.16   25.29     0.00
## educationAA Degree             6.54       0.18   35.51     0.00
## educationBachelors Degree     15.45       0.17   92.42     0.00
## educationGraduate Degree      22.23       0.18  122.61     0.00
## I(age - 25)                    0.23       0.00   79.09     0.00
```

Interpret the slope on Black in a single sentence:

The model predicts that, on average, a black worker makes $3.82/hour less than a white worker, holding constant education and age.

The model predicts that when comparing workers of the same education and age, a black worker will make $3.82/hour less than a white worker on average.

Interpret the slope on BA degree in a single sentence:

The model predicts that, on average, a worker with a Bachelor's degree makes $15.45/hour more than a worker with no high school diploma, holding constant race and age.

Interpret the intercept in a single sentence:

The model predicts that a 25-year old white person with no high school diploma will make $12.06/hour, on average.

Name (Print and Sign): _____