Plot height and weight of the "women" dataset. Make the title "Heights and Weights"

plot(women$weight,women$height, main="Heights and Weights")

Make a contingency table of tobacco consumption and education

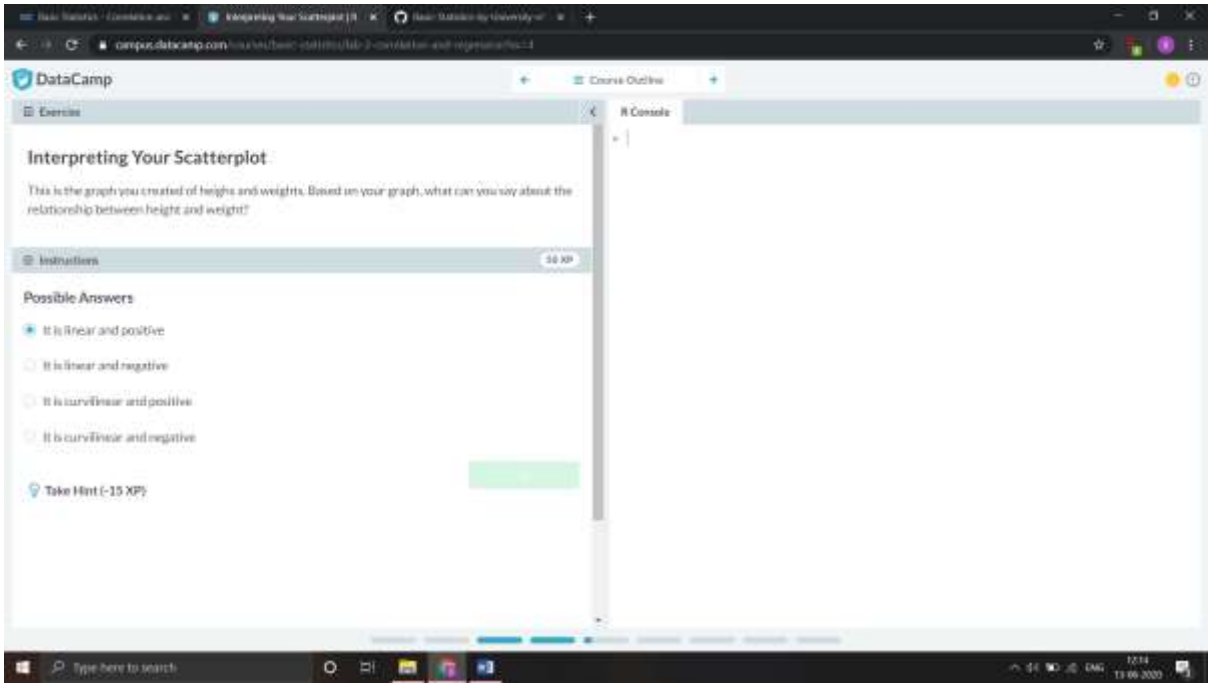
table(smoking$tobacco, smoking$student)

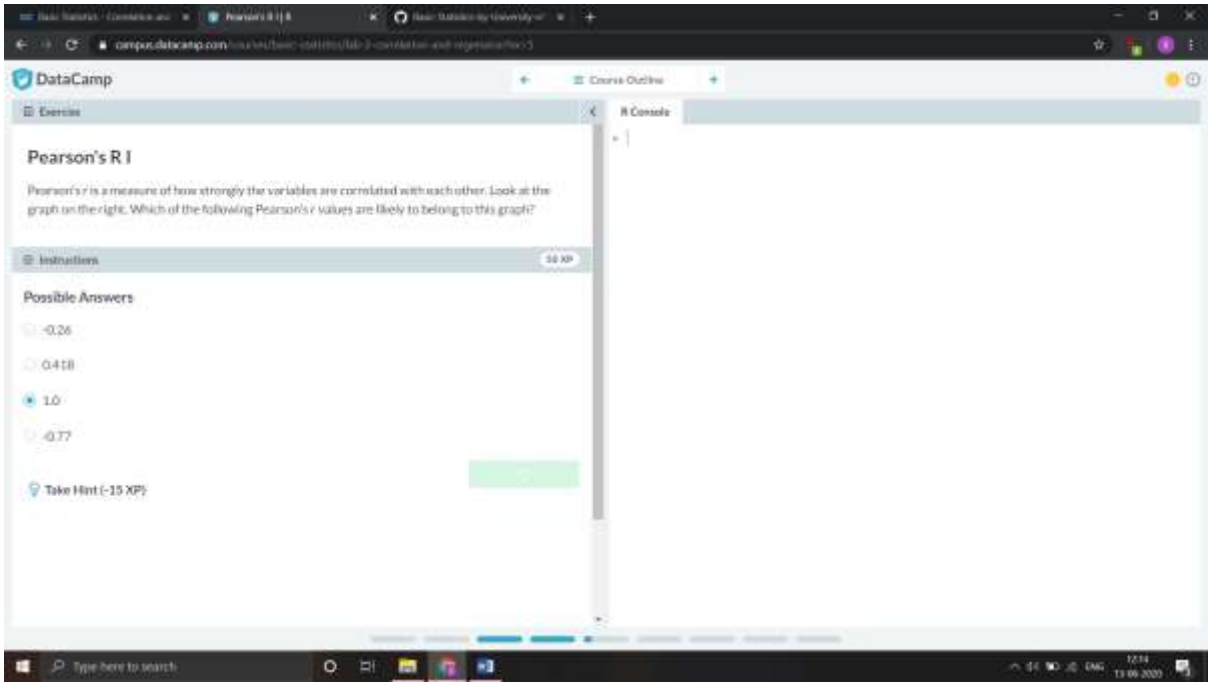
What percentage of high school students smoke 0-9g of tobacco?

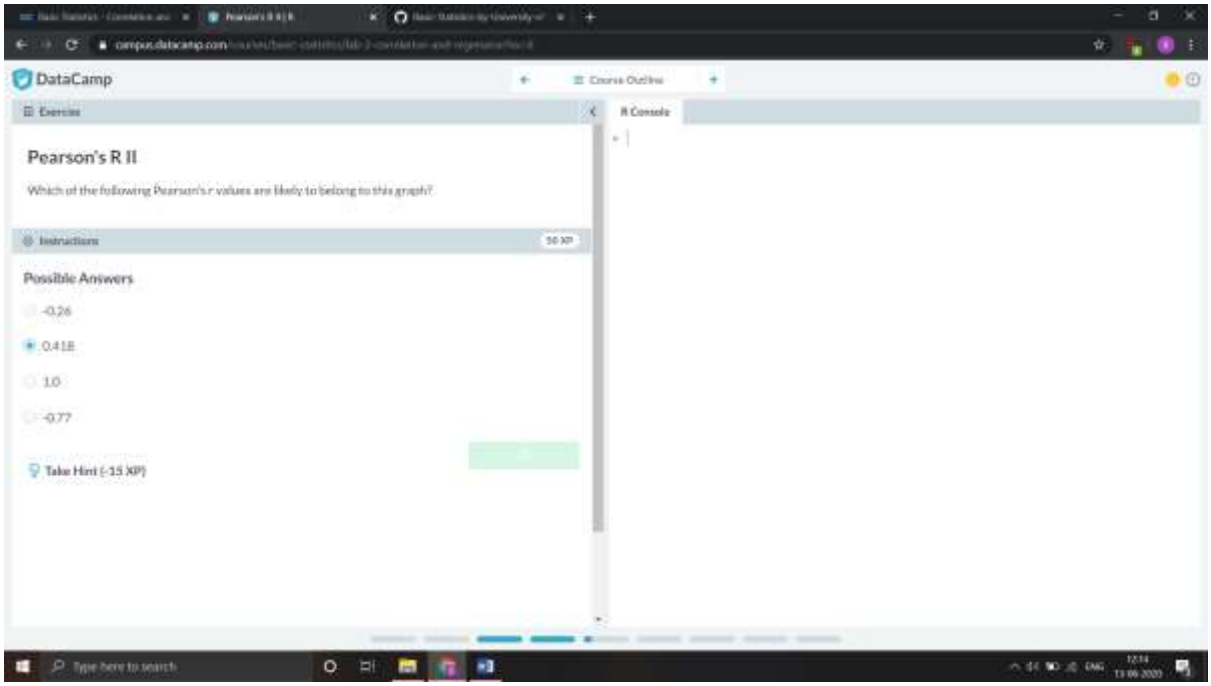
38.6

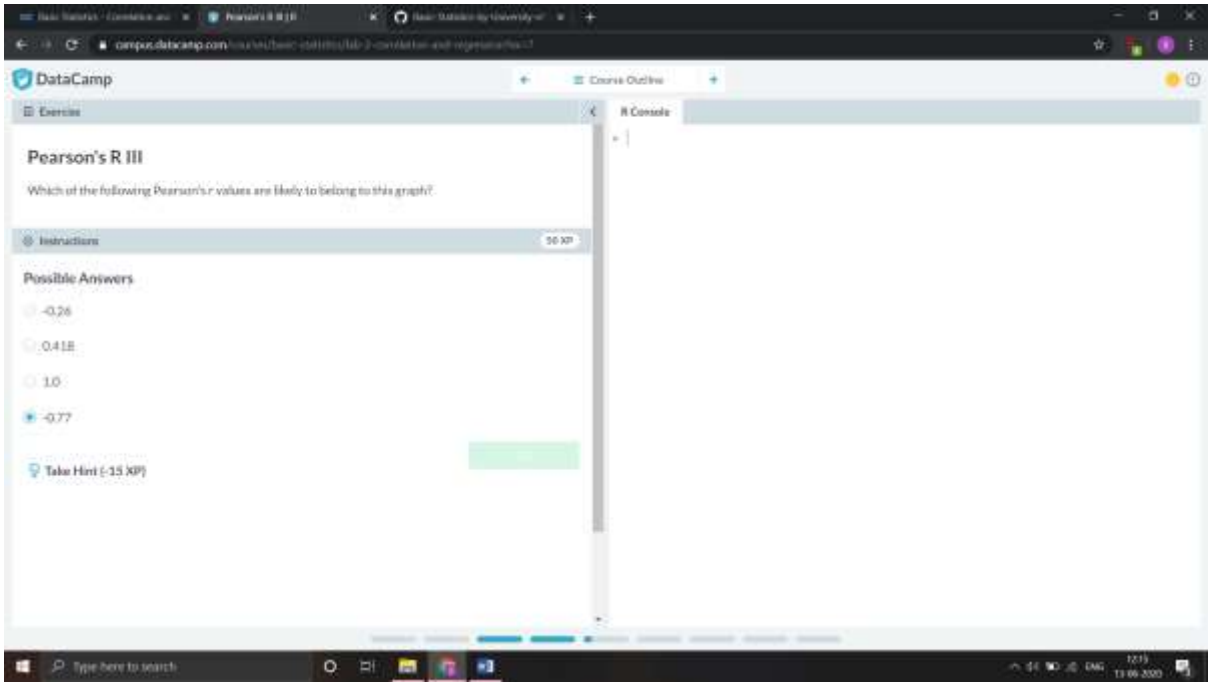
Of the students who smoke the most, what percentage are in university?

57.7






DataCamp
Course Outline
Exercise
R Console
Pearson's R II
Which of the following Pearson's r values are likely to belong to this graph?
Instructions
50 XP
Possible Answers
-0.26
0.418
1.0
-0.77
Take Hint (-15 XP)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Which of the following Pearson's r values are likely to belong to this graph?
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50 XP
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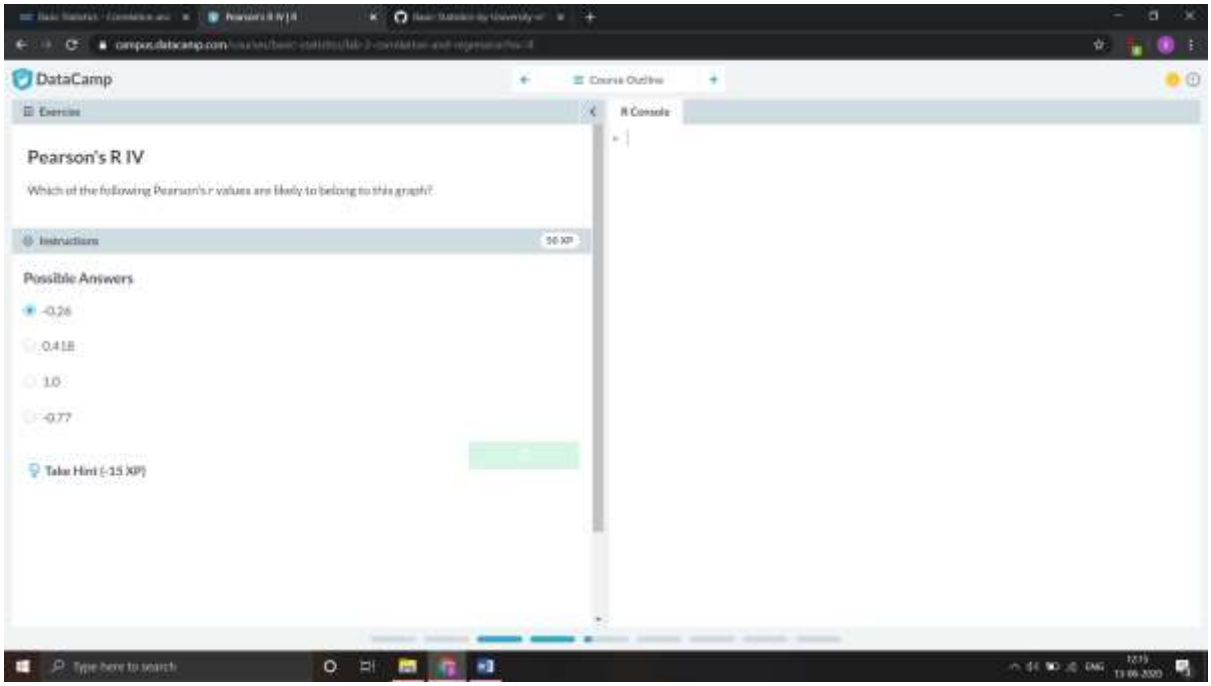
0.418
1.0
-0.77
Take Hint (-15 XP)




```
# Calculate the correlation between var1 and var2

cor(var1, var2)

# predicted values of y according to line 1

y1 <- c(1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

# predicted values of y according to line 2

y2 <- c(2, 3, 4, 5, 6, 7, 8, 9, 10, 11)

# actual values of y

y <- c(3, 2, 1, 4, 5, 10, 8, 7, 6, 9)

# calculate the squared error of line 1

sum((y1 - y) ^2)

# calculate the squared error of line 2

sum((y2 - y) ^2)
```

How prosocial would we predict someone to be when they recieve 6 units of money?

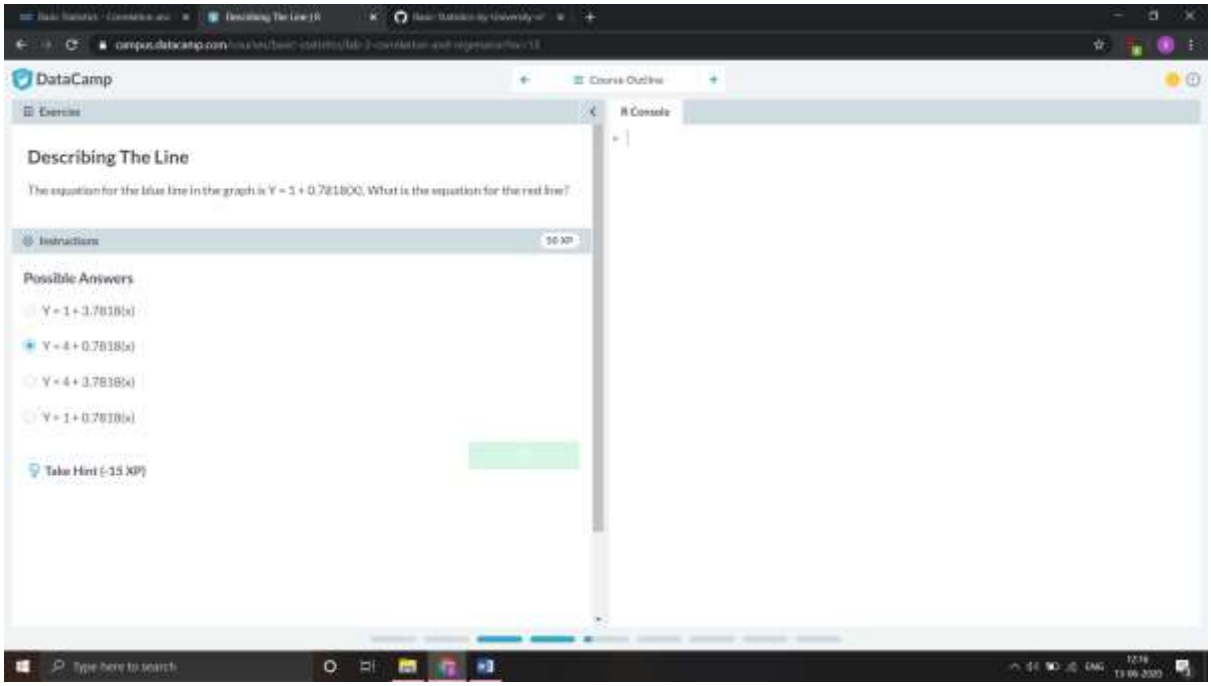
6

How prosical was the person who recieved 6 units of money in our study?

10

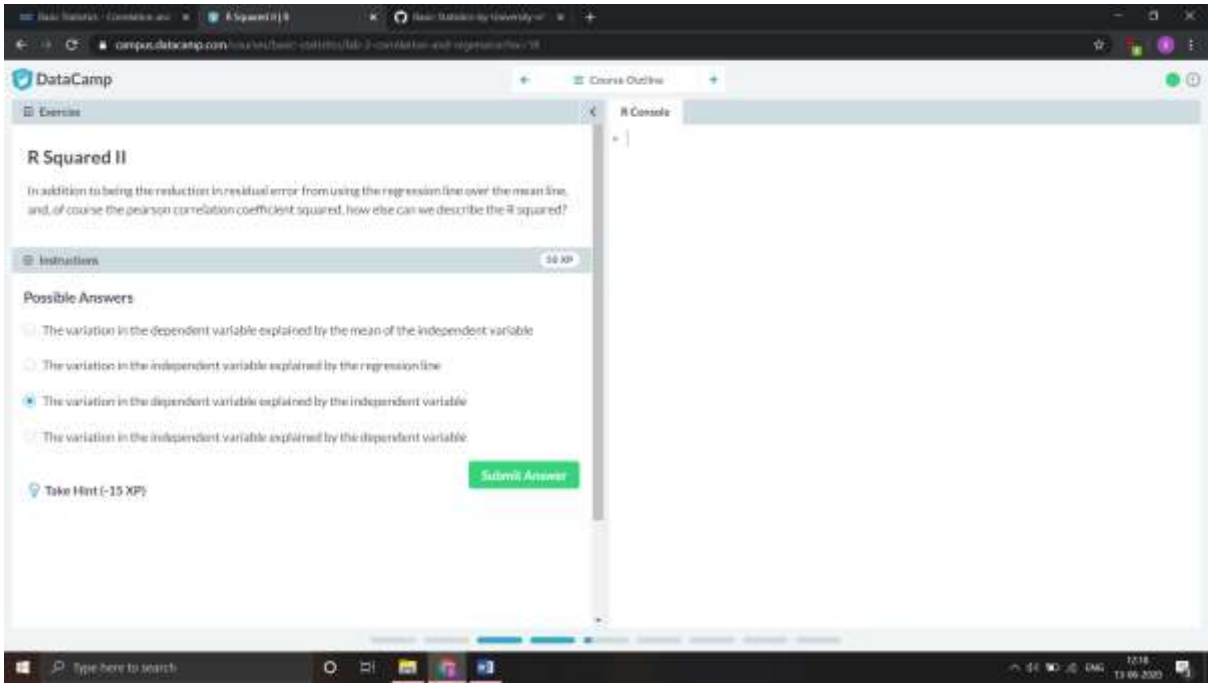
What is the risk taking level of a person with an extraversion level of 7?

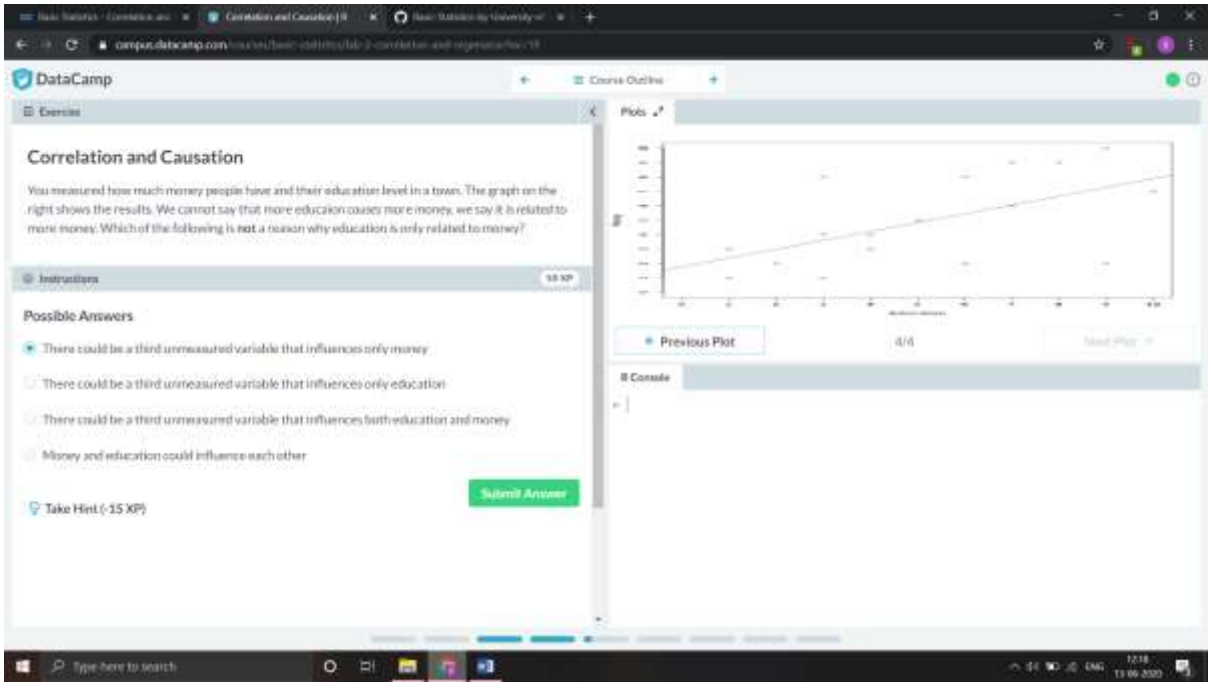
26.1




```
# Our data
money <- c(1,2,3,4,5,6,7,8,9,10)
prosocial <- c(3, 2, 1, 4, 5, 10, 8, 7, 6,9)
# Find the regression coefficients
lm(prosocial ~ money)
# Your plot
plot(money, prosocial, xlab = "Money", ylab = "Prosocial Behavior")
# Store your regression coefficients in a variable called "line"
line <- lm(prosocial ~ money)
# Use "line" to tell abline() to make a line on your graph
abline(line)
# Your plot
plot(money, prosocial, xlab = "Money", ylab = "Prosocial Behavior")
# Your regression line
line <- lm(prosocial ~ money)
abline(line)
# Add a line that shows the mean of the dependent variable
abline(mean(prosocial), 0)
# Calculate the R squared of prosocial and money
```

cor(money,prosocial) ^2





your data

money <- c(4, 3, 2, 2, 8, 1, 1, 2, 3, 4, 5, 6, 7, 9, 9, 8, 12)

education <- c(3, 4, 6, 9, 3, 3, 1, 2, 1, 4, 5, 7, 10, 8, 7, 6, 9)lab

calculate the correlation between X and Y

cor(money, education)

save regression coefficients as object "line"

line <- lm(money ~ education)

```
# print the regression coefficients
line
# plot Y and X
plot(education, money, main="My Scatterplot")
# add the regression line
abline(line)
# Percentage of people with high money that are university educated
83.3
# Percentage of people with low money that are high schol educated
72.7
# What kind of education is linked to more money?
"university"
```