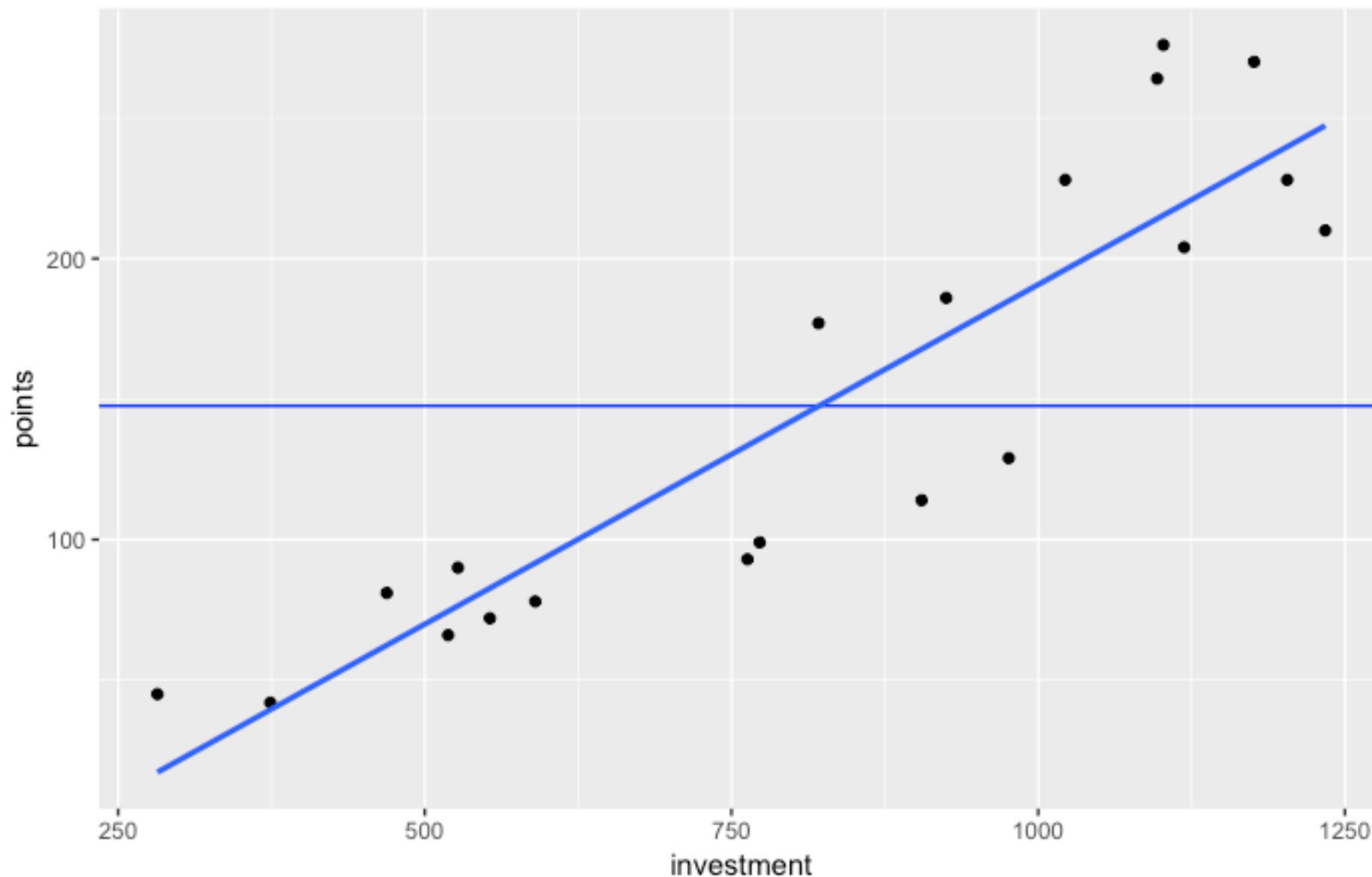


```
> # Let's add a regression line and a line of our outcome mean  
> ggplot(dataset1, aes(x = investment, y = points)) + geom_point() +  
  geom_hline(yintercept = mean(dataset1$points), colour = "blue") +  
  geom_smooth(method = "lm", se = FALSE)  
  
> # Let's calculate Pearson's r  
> rcorr(dataset1$investment, dataset1$points)
```



Pearson's $r = 0.9$, $p < .001$

Building a simple linear model

```
> # Let's do regression with just the one predictor  
  
> model0 <- lm (points ~ 1, data = dataset1)  
> model1 <- lm (points ~ investment, data = dataset1)
```

We have built two models - *model0* is a model with just the intercept (so the mean of our outcome) predicting the outcome (*points*) while *model1* is a model with *investment* predicting the outcome (*points*).

```
> # You can compare the two models to each other  
  
> anova(model0, model1)
```