8. If R_2 = {(x, y) | x and y are integers and $x^2 + y^2$ = 64} is a relation. Then find R_2.

Solution:

We have,

R_2 = {(x, y) | x and y are integers and $x^2 + y^2$ – 64}

So, we get,

x^2 = 0 and y^2 = 64 or x^2 = 64 and y^2 = 0

x = 0 and y = ±8 or x = ±8 and y = 0