Step-1

(a) $\frac{dy}{dx}=0$

$y=f(x)$ and $f(x)=k$ where k is any constant vector in the space.

The set of all functions $=\{/f(x)=K,K\in R\}$

Step-2

(b) Let $y(x)=3x+4$

Then y is a function in x

We get $\frac{dy}{dx}=3$

Step-3

(c) To find all functions satisfy $\frac{dy}{dx}=3$

$y(x)=3x+k$ where k is any constant vector.

Then $\frac{dy}{dx}=3$

The set of all functions that satisfy $\frac{dy}{dx}=3$ is

$=\{y(x)/y(x)=3x+K,K\in R\}$