***Given a gradient graph, find the equation of the function.***

***1. The minimum value of y is 3 and the graph of the gradient dy is given***

 ***dx***

***below. Find the equation of the graph and draw it on the axes below.***

 ***dy***

 ***dx***



 ***y***



***Working***

***Min point is ( , )***

***Equ of the gradient is dy =***

 ***dx***

***Antidiff to find equ for y:***

***y =***

***2. The minimum value of f(x) is 1.***

 ***The gradient function f ꞌ(x) is drawn below.***

***Find the equation of y = f(x) and draw the graph showing the y intercept.***

 ***f ꞌ(x)***



 ***f(x)***



***Working***

***Min point is ( , )***

***Equ of the gradient is f ꞌ(x) =***

***Antidiff to find equ for f(x)***

***f(x) =***

***3. The maximum value of g(x) = 5.***

***The gradient function gꞌ(x) is drawn below.***

***Find the equation of y = g(x) and draw the graph showing the y intercept.***

 ***gꞌ(x)***



 ***g(x)***



***Working***

***MAX point is ( , )***

***Equ of the gradient is gꞌ(x) =***

***Antidiff to find equ for g(x)***

***g(x) =***

***4. The minimum value of p(x) = 1.***

***The gradient function pꞌ(x) is drawn below.***

***Find the equation of y = p(x) and draw the graph showing the y intercept.***

 ***p ꞌ(x)***



 ***p(x)***



***Working***

***Min point is ( , )***

***Equ of the gradient is pꞌ(x) =***

***Antidiff to find equ for p(x)***

***p(x) =***