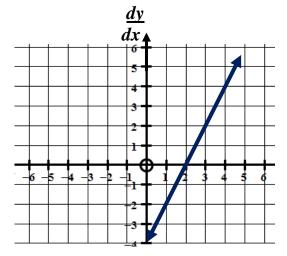
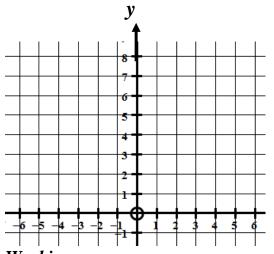
Given a gradient graph, find the equation of the function.

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.





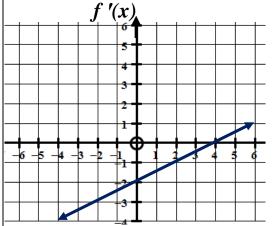
Working
Min point is (,)

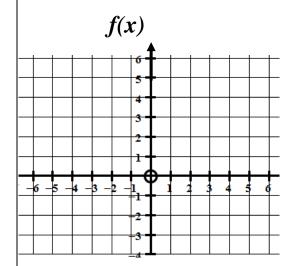
Equ of the gradient is $\frac{dy}{dx} = \frac{dx}{dx}$ Antidiff to find equ for y:

y =

2. The minimum value of f(x) is 1. The gradient function f'(x) is drawn below.

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





Working
Min point is (,

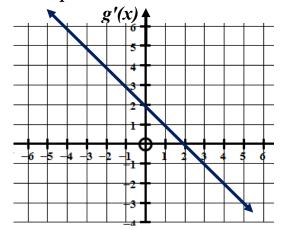
Equ of the gradient is f'(x) =

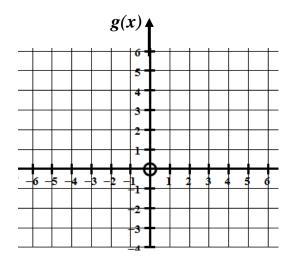
Antidiff to find equ for f(x)

f(x) =

3. The maximum value of g(x) = 5. The gradient function g'(x) is drawn below.

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





Working

MAX point is (,)

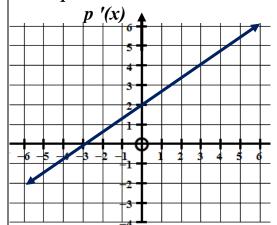
Equ of the gradient is g'(x) =

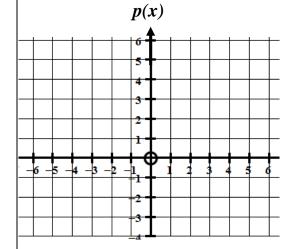
Antidiff to find equ for g(x)

$$g(x) =$$

4. The minimum value of p(x) = 1. The gradient function p'(x) is drawn below.

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





Working

Min point is (,)

Equ of the gradient is p'(x) =

Antidiff to find equ for p(x)

$$p(x) =$$