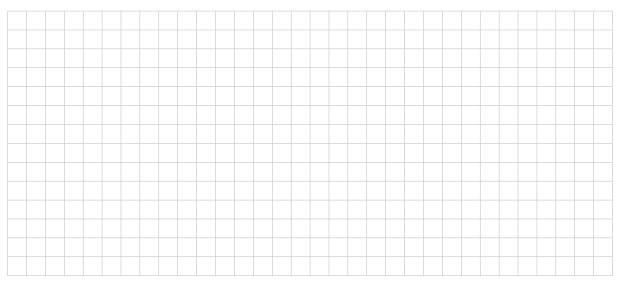
## Question 3 (6 marks)

(a) Write the expression  $5\ln 2 + \frac{1}{2}\ln 16 - \ln 8$  in the form  $\ln k$ .



(3 marks)

(b) Solve the equation  $\ln 16 + 2 \ln x = 0$  for x > 0.



(3 marks)