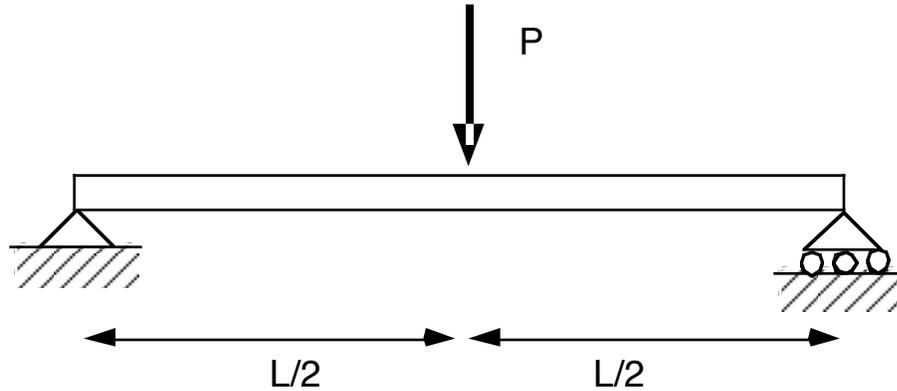
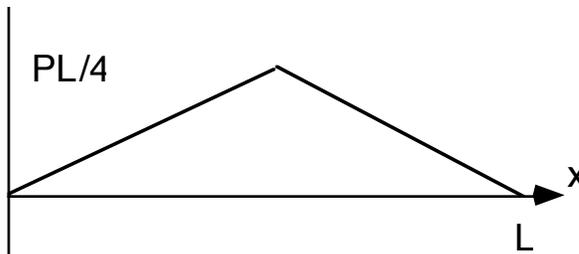


### M3 Concept Question 1

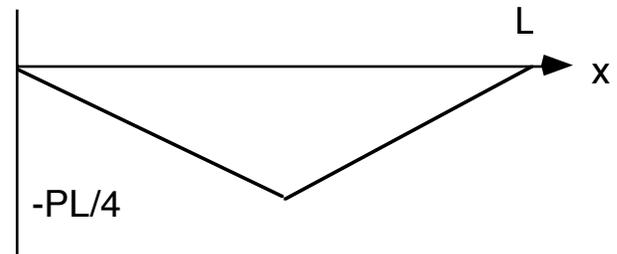
For the simply supported beam shown below, which is the correct bending moment diagram:



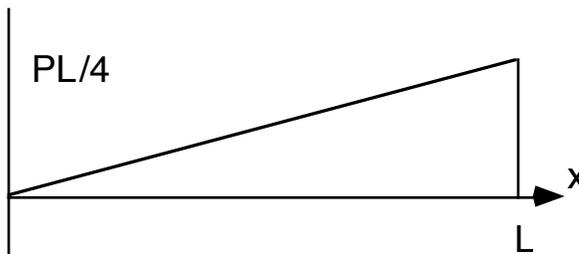
1.



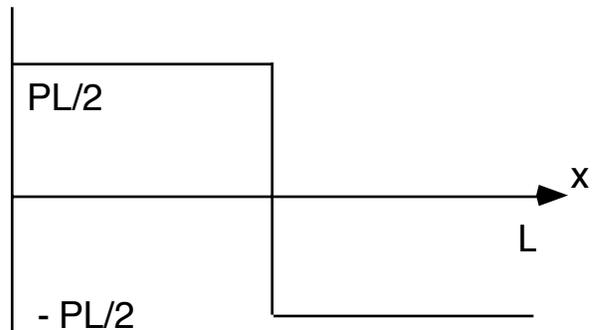
2.



3.



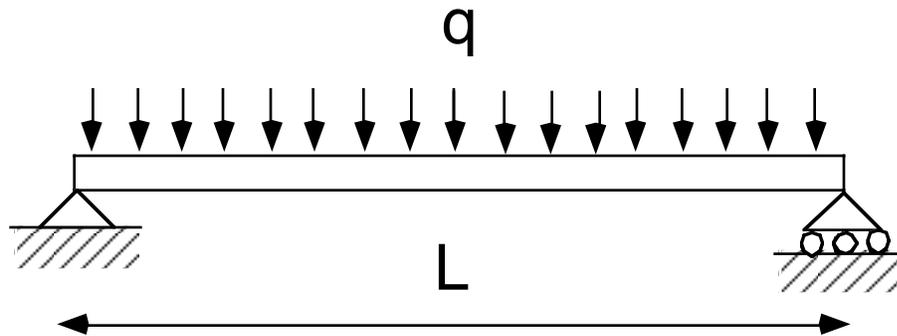
4.



5. The bending moment is constant  $- PL/2$  everywhere
6. Some other answer
7. I do not know/do not understand

### M3 Concept Question 2

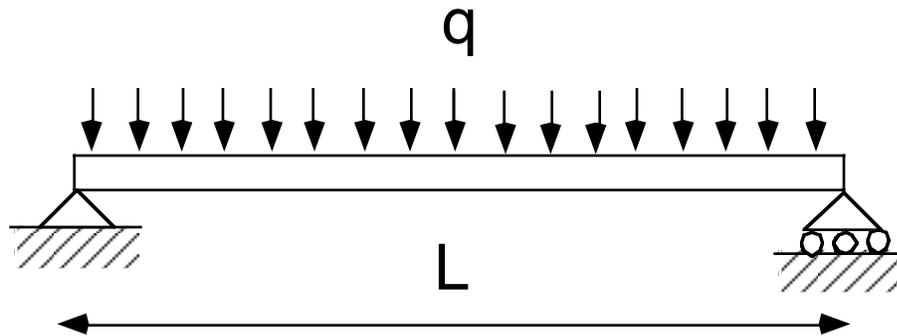
For the simply supported beam with a uniform distributed loading  $q$  (per unit length), the most correct expression or the bending moment distribution is:



1.  $M = \frac{qLx}{2} \int_0^x qxdx$
2.  $M = \int_0^x qxdx \int \frac{qLx}{2}$
3.  $M = qLx$
4.  $M = qL/2$
5.  $M = qL/4$
6. Some other answer
7. I don't know/don't understand.

### M3 Concept Question 3

For the simply supported beam with a uniform distributed loading  $q$  (per unit length), the most correct expression or the shear force distribution is



1.  $S = q$
2.  $S = qx$
3.  $S = qL$
4.  $S = \int_0^x q dx$
5.  $S = \frac{qL}{2} - \int_0^x q dx$
6. Some other answer
7. I don't know/don't understand.