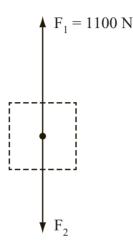
The free-body force diagram below

represents two forces, F1 and F2, acting on a hot air balloon as it rises through the air.



If the net force acting on the balloon is 120 N upward, what is the magnitude of F_2 ?

A. 980 N

B. 1100 N

C. 1200 N

D. 1220 N