

**Mathematics Questions by Topics**

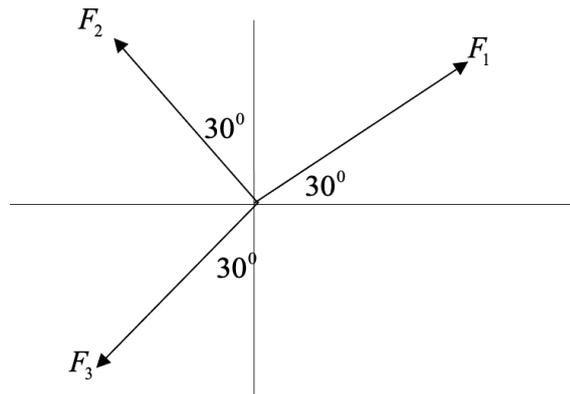
Motion and Force

Question 38

Source: K9SM2Q11

**Question 38**

Three co-planar forces,  $F_1, F_2, F_3$  act on a particle in equilibrium as shown in the diagram below



It follows that

- A.**  $F_1 = F_2 = F_3$
- B.**  $3F_2 = \sqrt{3}F_1$  and  $F_2 = \frac{2}{3}F_3$
- C.**  $F_1 = \sqrt{3}F_2$  and  $F_3 = 2F_2$
- D.**  $\sqrt{3}F_1 = 3F_2$  and  $F_2 = \frac{3}{2}F_3$
- E.**  $\sqrt{3}F_3 = 3F_2$  and  $F_1 = \frac{3}{2}F_3$