

**Mathematics Questions by Topics**

Motion and Force

Question 49

Source: K5SM1Q25

**Question 49**

A suitcase of mass 12 kilograms rests on a rough, level ground. The suitcase is pulled with a force of magnitude  $P$  newtons acting at an angle of  $30^\circ$  to the horizontal. The suitcase is just on the point of sliding along the ground. If the coefficient of friction between the suitcase and the plane is 0.25, then  $P$  is closest to

- A. 58.8
- B. 29.67
- C. 39.67
- D. 3.03
- E. 33.95