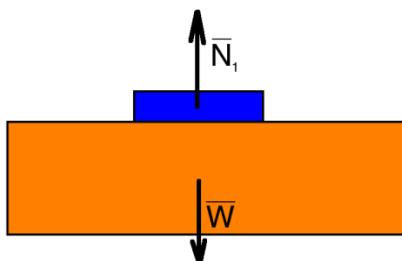


How much support force does a table exert on a book that weighs 15N when the book is placed on the table?

Solution



N_1 - reaction force, the table exert on a book with this force;
 W – the weight of the book;

Third Newton's law: When one body exerts a force on a second body, the second body simultaneously exerts a force equal in magnitude and opposite in direction to that of the first body:

$$\vec{N}_1 = -\vec{W}; |\vec{N}_1| = |\vec{W}|$$
$$N_1 = W = 15N$$

Answer: the table exert on a book with the force $N_1 = 15N$