**The National Orthodox School /Shmaisani**

**Subject: Science/ Physics**

**Name: Title: Pressure Worksheet**

**Date: Grade-Section: 8- ……CS**

Question 1) A block of weight 850N has a length of 0.5 m and a width of 0.4 m and a height of 0.3 m.

1. Find the smallest pressure that this block exerts on the ground.

0.4 x 0.5= 0.2

P= F/A ===> 820/0.2= 4250 N/m²

1. Find the largest pressure that this block exerts on the ground.

0.3 x 0.4= 0.12

P= F/A ===> 820/0.12= 6833.33 N/m²

Question 2) The force applied to a 0.4 cm by 0.8 cm brake pad produces a pressure of 500 N/cm². Calculate the force applied to the brake pad.

0.4 x 0.8= 0.32

F= A x P ===> 0.32 x 500= 160N