**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.

Pmin= f/a max = 850/0.5x0.4 =850/0.2=4250n/m2

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

Pmax =f/a min =850/0.3x0.4=850/0.12=7083.3n/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.

F=pxa = 500x0.4x0.8= 500x0.32=160n/cm2