**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.

P=f/a = 800/0.2 x 10 = 8500/2 =4250 n/m 2

Or 4250 Pa

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

P= f/a = 850/0.12 = 85000/12 = 7083.33 n/m 2

Or 7083.33 Pa

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= A x P P=500 N/cm2

=0.32x500 A=0.32cm2

=160N F=??

Area of the break pad=0.4 x 0.8

=0.32

=0.32cm2