**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 min= f over area max

A max= 0.5x0.4=0.2 cm2

P min=850 over 0.2=4250 cm2

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

P max=f over area min

A min=0.4x0.3=0.12cm2

P max=850 over 0.12=7083.3

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

A=0.4x0.8=0.32

F=500x0.32=160cm2