**The National Orthodox School /Shmaisani**

**Subject: Science/ Physics**

**Name Fares Arida 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 largest area=0.5\*0.4=0.2 m^2 so P(Min)=850/0.2=4250N/m^2

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

P=F/A Smallest area=0.4\*0.3=0.12 m^2 so P(MAX)=850/0.12=7083.33N/m^2

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=P\*A Area=0.4\*0.8=0.32 cm^2

So F=500\*0.32= 160 N