Subject: Science/ Physics

Name: Isaiah   **Title: Pressure Worksheet**

Date: 16/9/2022   **Grade-Section: 8- H 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.

   a) Find the smallest pressure that this block exerts on the ground.

$P_{min}=F/A_{max}=850/0.5 \times 0.4=850/0.2=$ 4,250 N/M²

   b) Find the largest pressure that this block exerts on the ground.

$P_{max}=F/A_{min}=850/0.4 \times 0.3=850/0.12=$ 7,083.33 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.

$F=P \times A=500 \times (0.4 \times 0.8)=500 \times 0.32=$ 160 N