


CP - Jan 30
 CLT students will calculate pressure based on force and surface area to determine best uses.

Pressure = $\frac{\text{Force}}{\text{area}}$

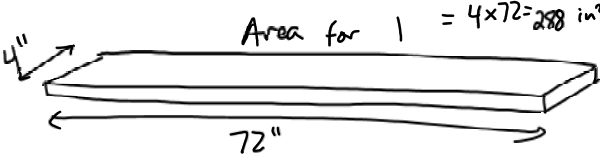
Butt print $\rightarrow \frac{\text{N}}{\text{m}^2}$

$$\frac{140 \text{ lbs}}{120 \text{ in}^2} = \frac{1.17 \text{ lbs}}{\text{in}^2}$$



$\frac{3}{8} \times \frac{3}{8} = \frac{9}{64}$
 $.14 \text{ in}^2$

Pressure under one heel $\frac{130 \text{ lbs}}{.14 \text{ in}^2} = 928.57 \frac{\text{lb}}{\text{in}^2}$



Area for 1 = $4 \times 72 = 288 \text{ in}^2$

Area for 2 = 576 in^2

High heel lady goes skiing

$$\frac{130 \text{ lbs}}{576 \text{ in}^2} = .23 \frac{\text{lbs}}{\text{in}^2}$$

snow shoe $28\text{ in} \times 11\text{ in} = 308\text{ in}^2$

$$\frac{130\text{ lb}}{308\text{ in}^2} = .42 \frac{\text{lb}}{\text{in}^2}$$

