

WORKSHEET NO - 5

NAME :

CLASS : VI

CHAPTER: FORCE AND PRESSURE

GRADE:

SUB: PHYSICS

DATE:

1. If Ravi pulls a cart by applying force 300 newton and Deepak pulls with a force of 200 newton. What will be the net resultant force.
2. An elephant weighing 40,000 newton stands on one foot of area $1000 \text{ m}^2 (=1/10 \text{ m}^2)$. What pressure is exerted on the ground?
3. What is the pressure exerted by a girl weighing 400 newton standing on one 'stiletto' heel of area $1 \text{ cm}^2 (=1/10,000 \text{ m}^2)$?

4. Compare the answers of question 2 and 3, which exerts more pressure per unit volume and why? Explain.
5. What is the magnitude of force required in newtons to produce a pressure of 26500 Pa on an area of 100 cm^2 ?
6. A force of 100 newton can produce a pressure of $100,000 \text{ Pa}$. Calculate the area in cm^2 on which the force acts.