Answer on Question#41025, Physics, Mechanics Question: Given that the maximum force your forehead can take is about 6000N, while the maximum force your cheekbone can take is 1300N. If a 0.14 kg solid ball strikes any part of your head at 39 m/s and stops in $1.2 \cdot 10^{-3}$ s, which of the following is correct: a) Only your forehead will be in danger of fraction. b) Nor your forehead neither your cheekbone will be in danger of fraction c) Only your cheekbone will be in danger of fraction. d) Both your forehead and your cheekbone will be in danger of fraction e) I cannot decide because the mass of the head is not known
Solution. First we find applied force.

$$F = \frac{\Delta p}{\Delta t} = \frac{mv}{\Delta t} = \frac{0.14 \cdot 39}{1.2 \cdot 10^{-3}} = 4.55 \cdot 10^3\, N$$

So we can now infer from that: c) Only your cheekbone will be in danger of fraction.