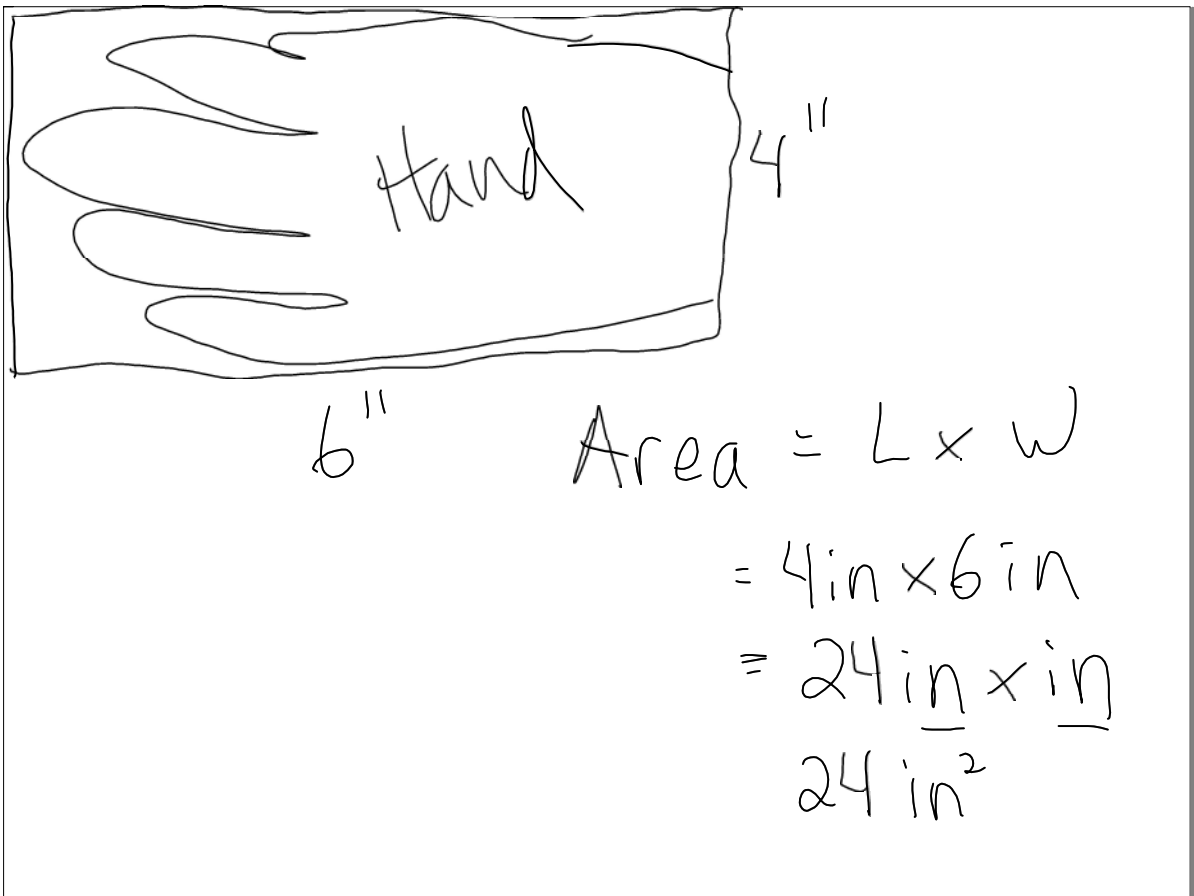


Sept 11

What makes your ears pop?

- airplane
- going down in water
- up a mountain / down?
- Tall Buildings up/down

Pressure is changing



Atmospheric Pressure

$$14.7 \frac{\text{lb}}{\text{in}^2} \times \frac{24 \text{ in}^2}{1}$$

$$14.7 \text{ lb} \times 24 = 352.8 \text{ lb}$$

pressing on
one side of
your hand.

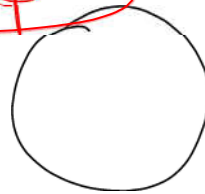
Avg Adult has

46,000 lbs pressing
on their whole body.

Suction cup



5 in



area

$$\pi r^2 \text{ diameter}$$

$$3.14 \times (2.5 \text{ in})^2$$

$$3.14 \times 6.25 \text{ in}^2 =$$

$$19.625 \text{ in}^2$$

$$14.7 \frac{\text{lb}}{\text{in}^2} \times \frac{19.625 \text{ in}^2}{1} =$$

288 lb