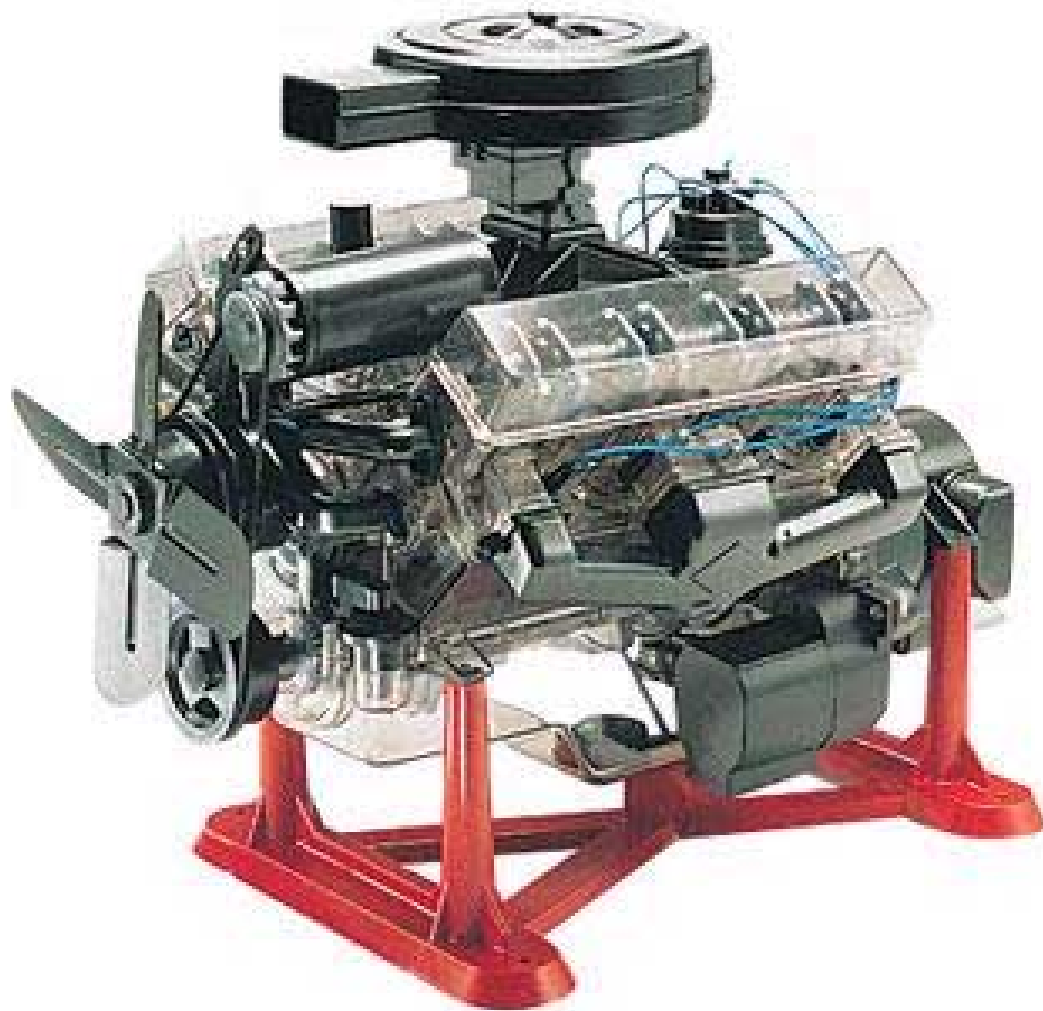


# Number of moles of $O_2$ in a cylinder



## Number of moles of $O_2$ in a cylinder

An internal combustion engine works on the principle that a small volume of fuel is combusted to create a hot gas. When the piston in a 0.5 liter cylinder is compressed the volume is very small (approx. 0.02 liters). This is typical for a 6 cylinder 3.0 liter engine. How many moles of  $O_2$  gas are present in that volume at 298 K?