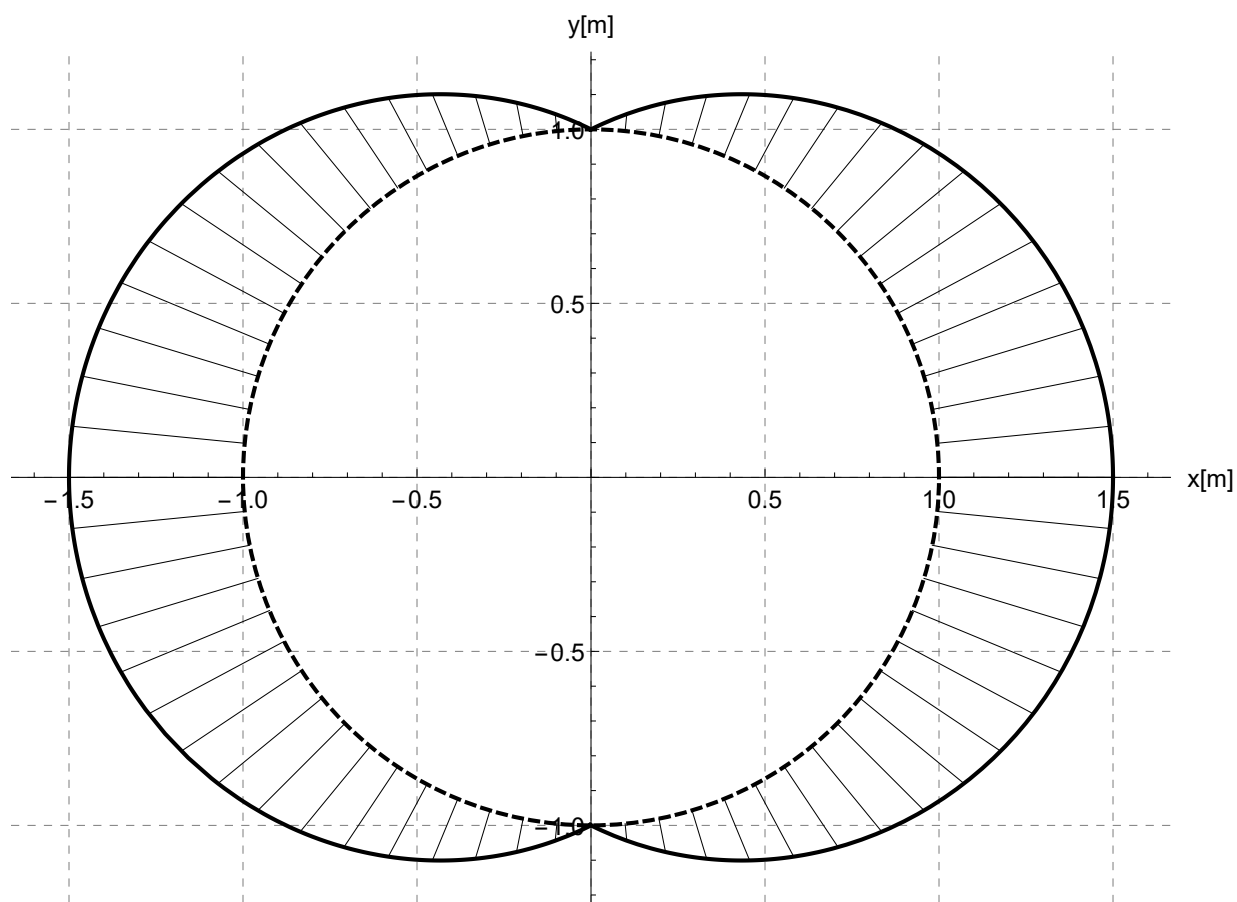
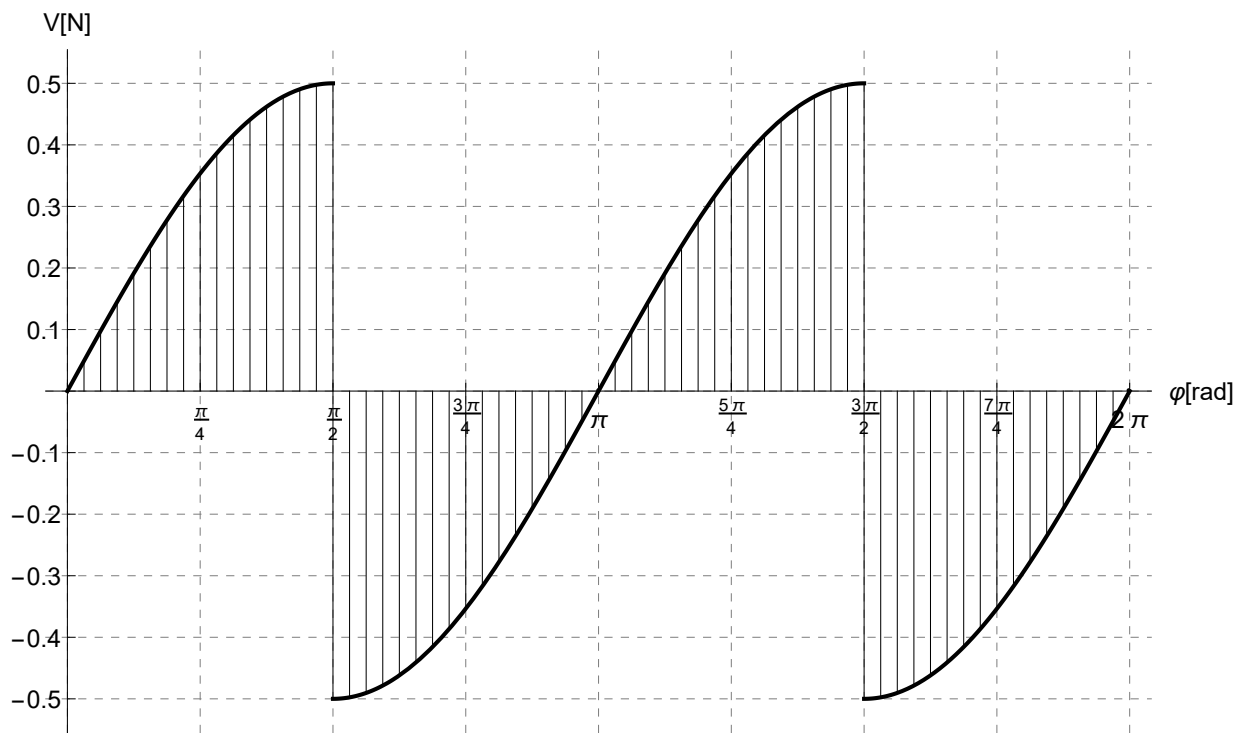


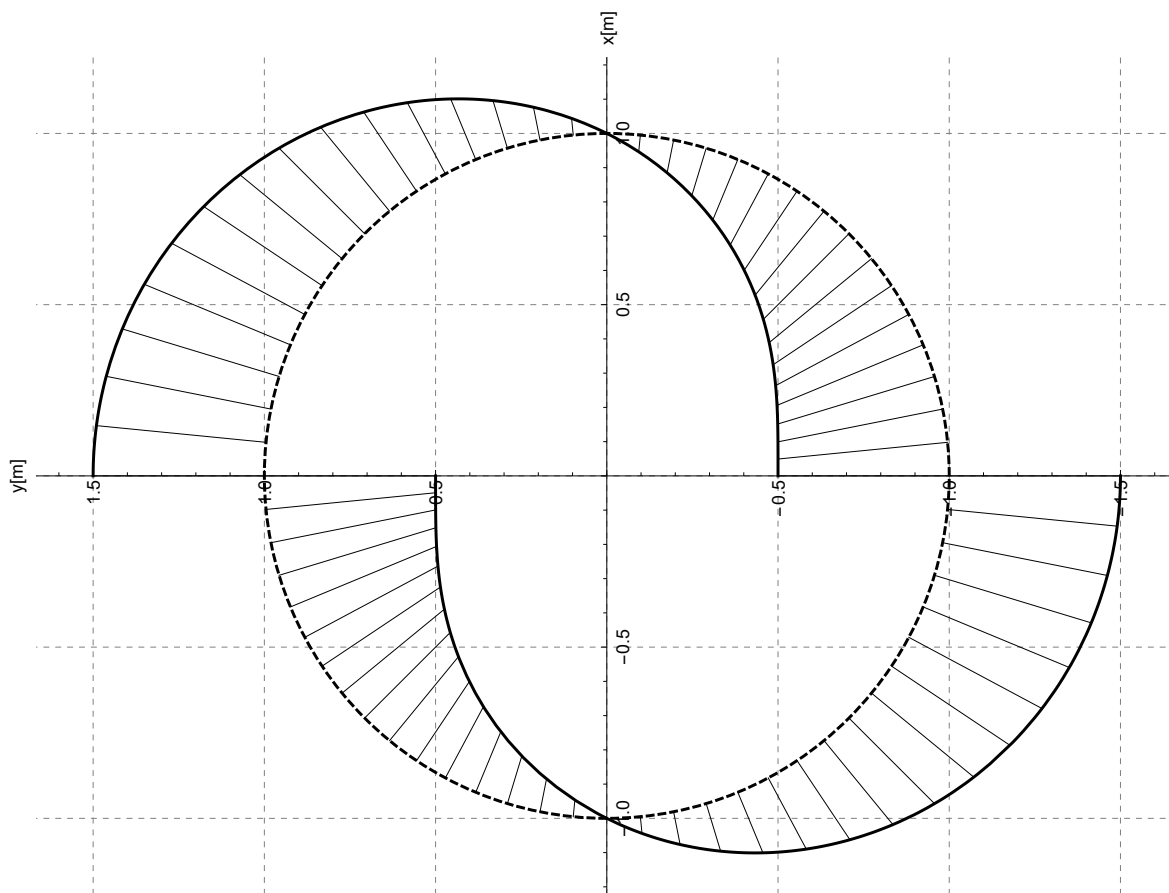
1. ábra. 12.1) normál igénybevétel, $F = 1$ [N], $R = 1$ [m]



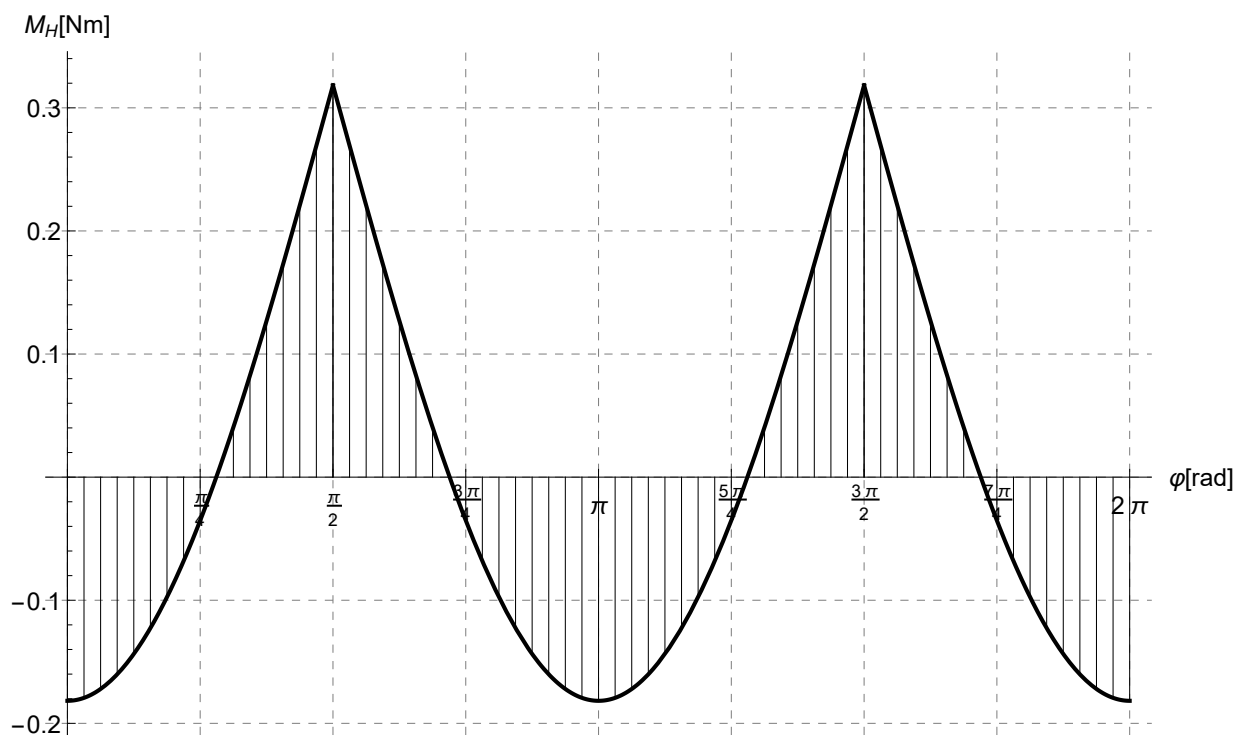
2. ábra. 12.1) normál igénybevétel, $F = 1$ [N], $R = 1$ [m]



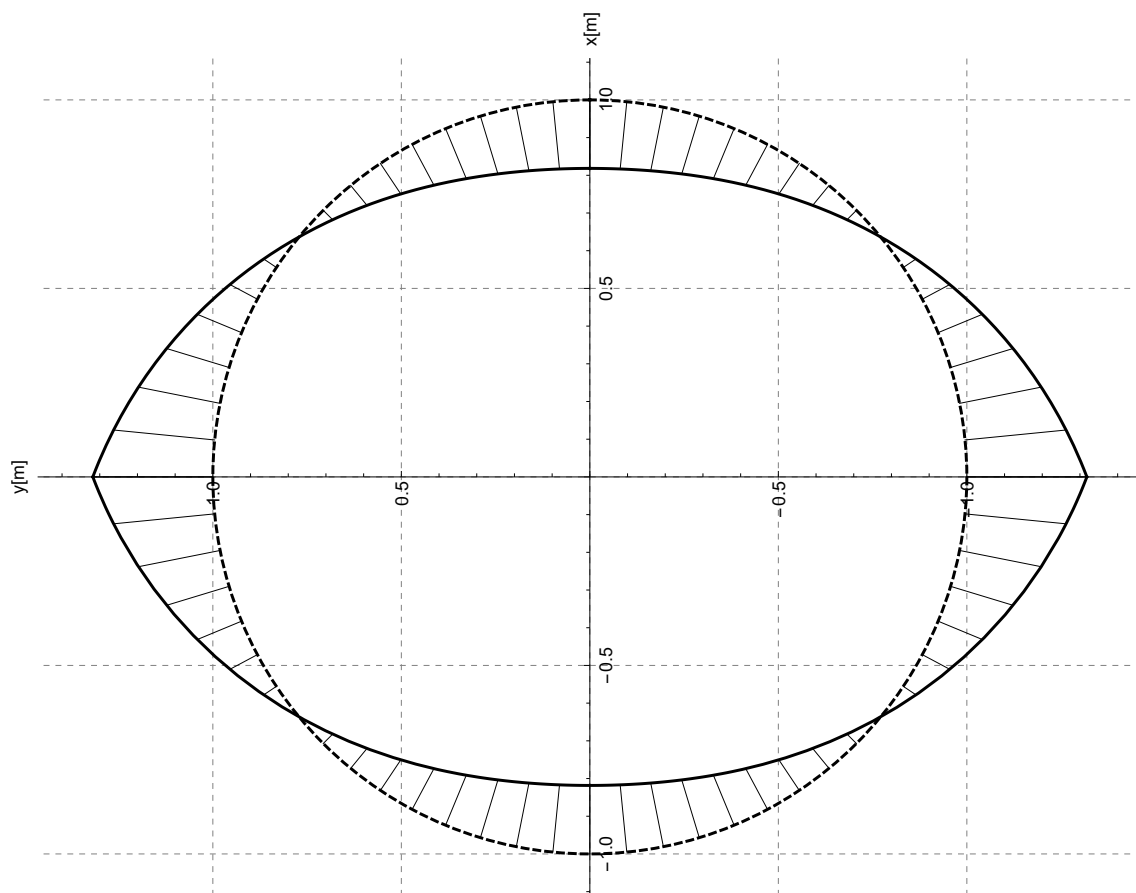
3. ábra. 12.1) nyíró igénybevétel, $F = 1$ [N], $R = 1$ [m]



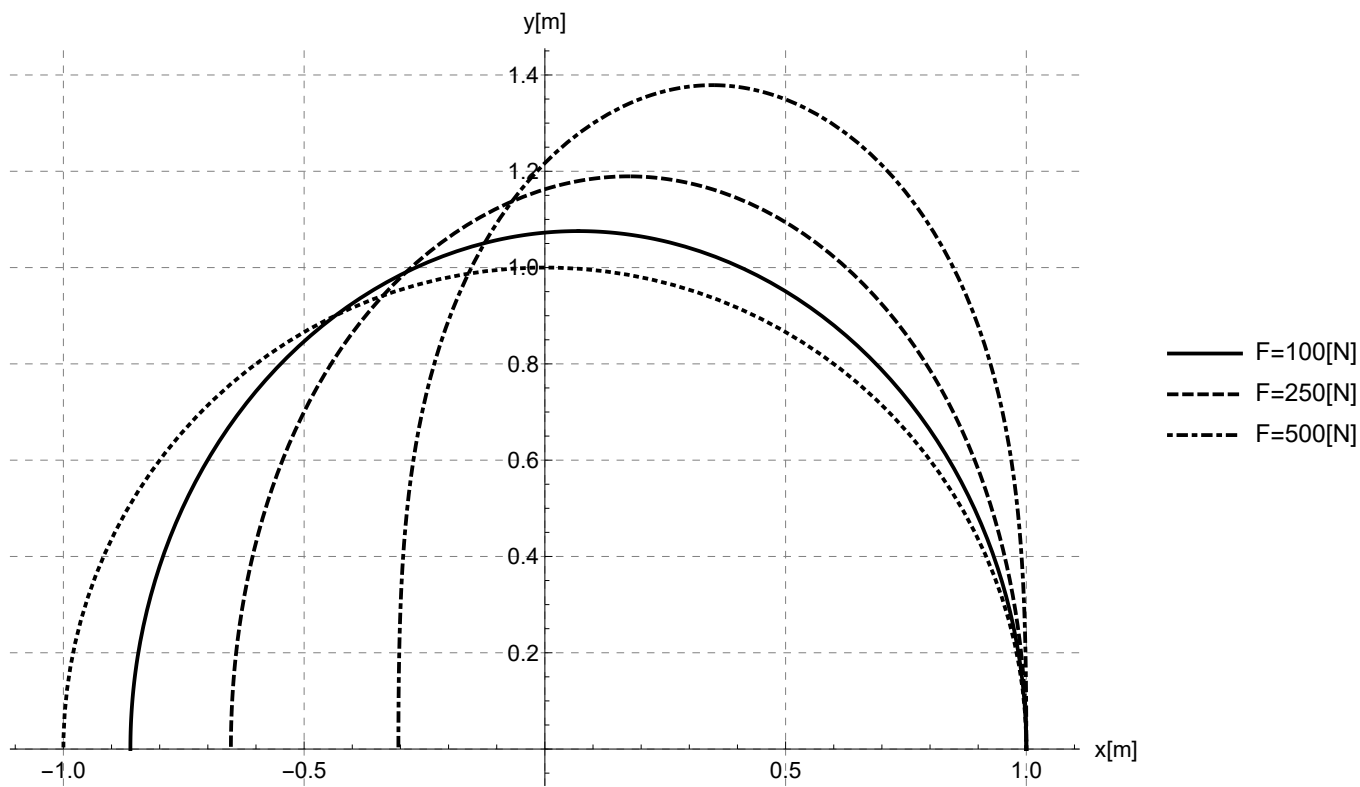
4. ábra. 12.1) nyíró igénybevétel, $F = 1$ [N], $R = 1$ [m]



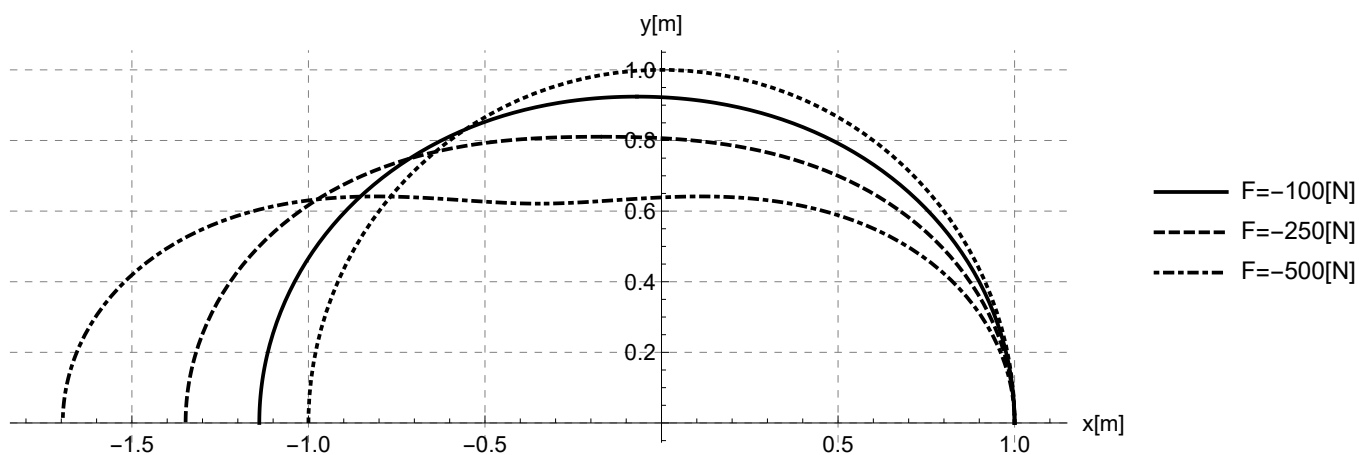
5. ábra. 12.1) hajlítónyomaték, $F = 1$ [N], $R = 1$ [m]



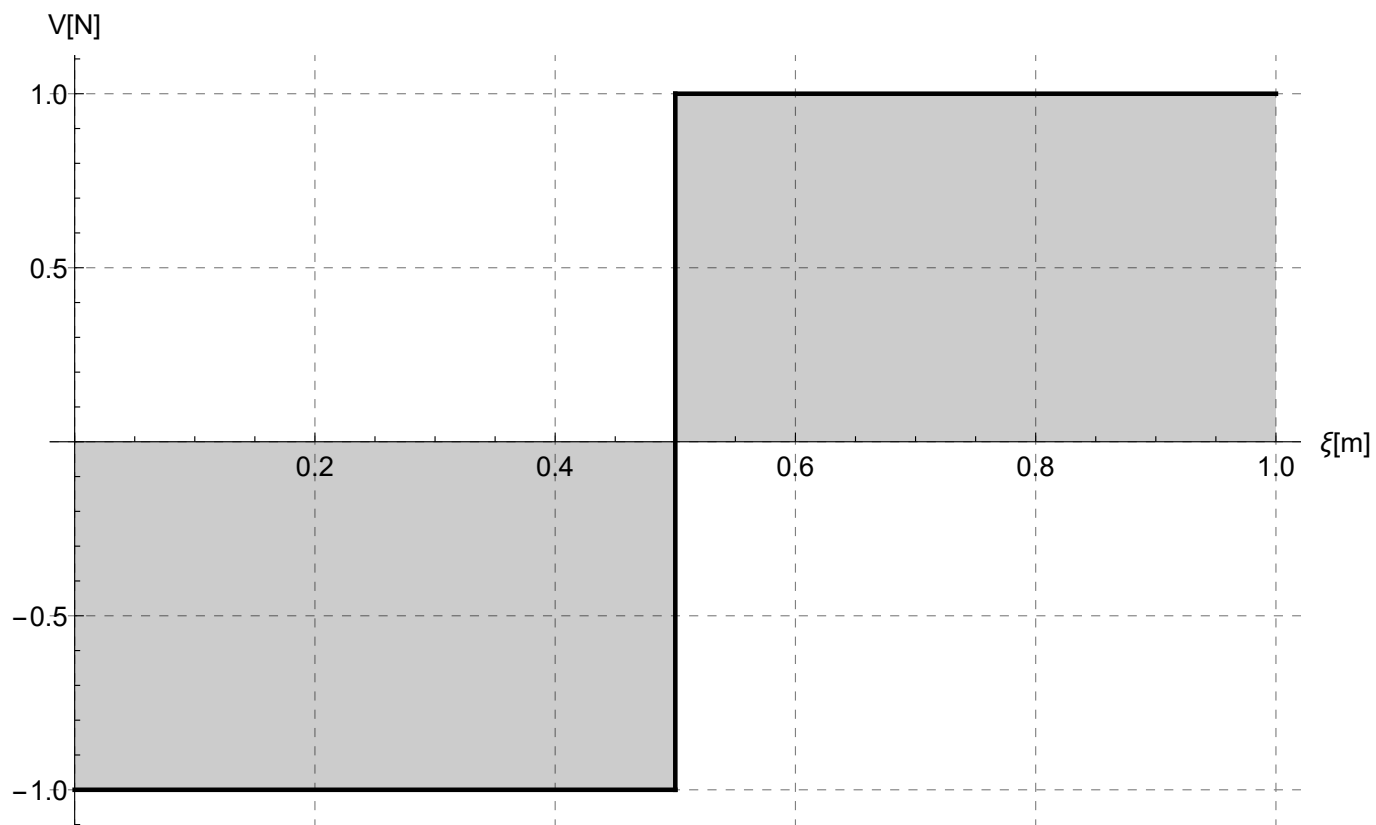
6. ábra. 12.1) hajlítónyomaték, $F = 1$ [N], $R = 1$ [m]



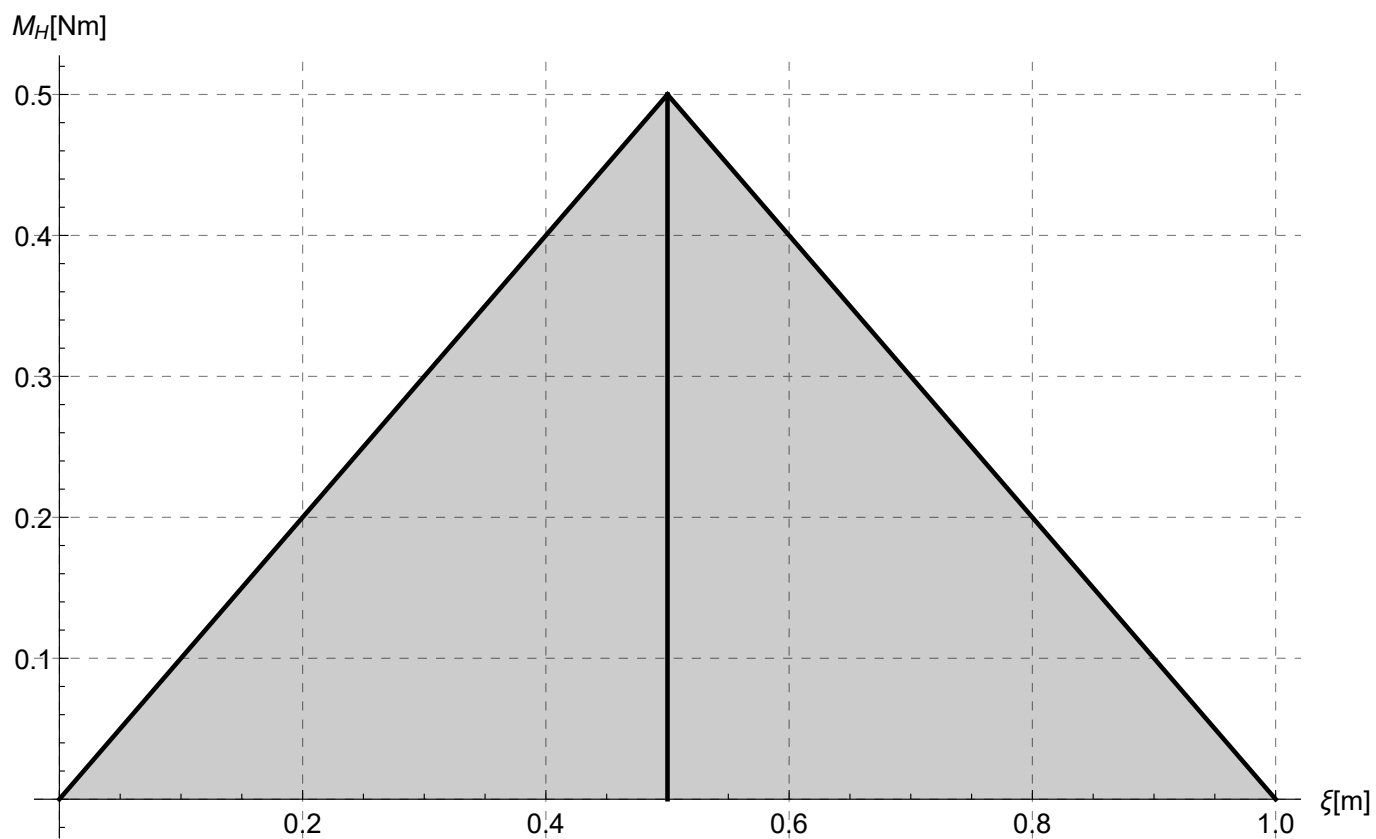
7. ábra. 12.1) deformálódott alak (+), $F = 1$ [N], $R = 1$ [m], $d = 10$ [mm], $E = 200$ [GPa]



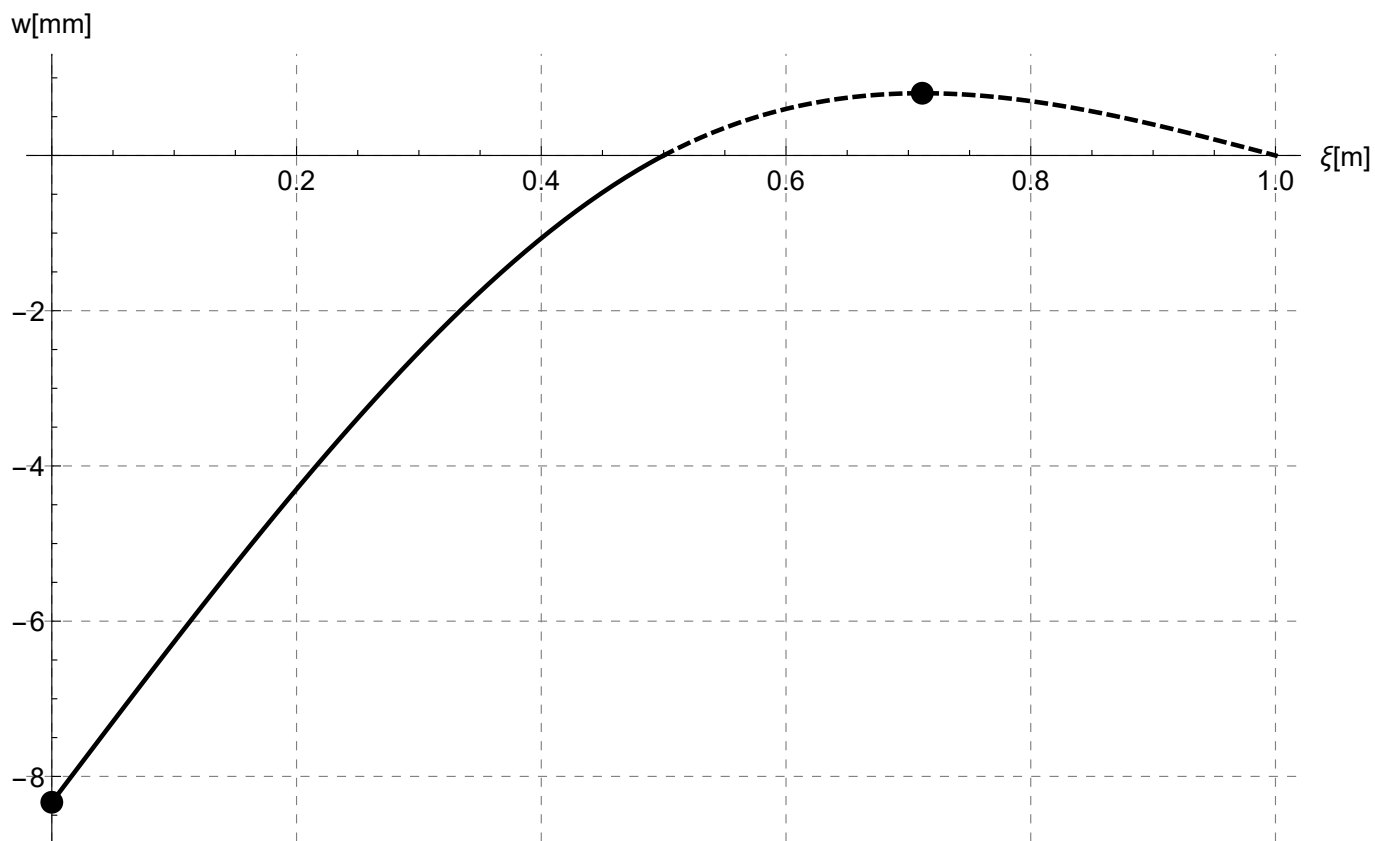
8. ábra. 12.1) deformálódott alak (-), $F = 1$ [N], $R = 1$ [m], $d = 10$ [mm], $E = 200$ [GPa]



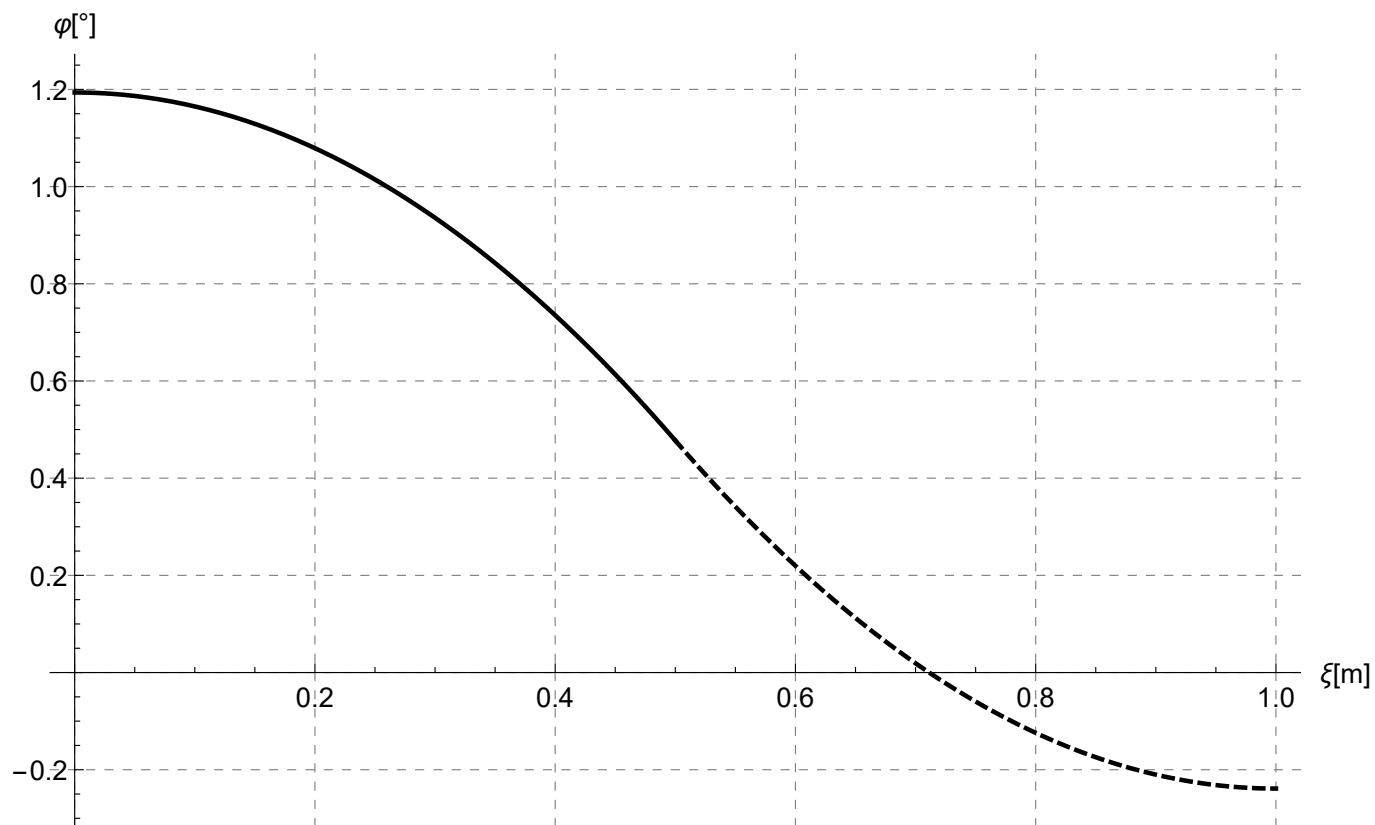
9. ábra. 12.2) nyíróerő, $F = 1 [\text{N}]$, $L = 1 [\text{m}]$



10. ábra. 12.2) hajlítónyomaték, $F = 1 [\text{N}]$, $L = 1 [\text{m}]$



11. ábra. 12.2) deformálódott alak, $F = 1$ [N], $L = 1$ [m], $IE = 10$ [Nm²]



12. ábra. 12.2) szögelfordulás, $F = 1$ [N], $L = 1$ [m], $IE = 10$ [Nm²]