

```

In[201]:= (*Kodutöö NR 2
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MinuPytt[R_, L_, l_, H_] := Module[{Vs, Vk},
  If[H < 0, "Mahutis pole vett", If[H > 2 * R, "Vedeliku kõrgus ületab mahuti diameetri",
    Vs =  $\pi * R^2 * L / 2 + R^2 * \text{ArcSin}[(H - R) / R] + (H - R) * \text{Sqrt}[2 * H * R - H^2]$ ;
    If[H ≤ R, d = R - H;
      Vk = NIntegrate[1 / R * (r^2 * ArcCos[d / r] - d * Sqrt[r^2 - d^2]), {r, d, R}];
      N[Vs + 2 * Vk], d = H - R;
      Vk = NIntegrate[1 / R * (r^2 * ArcCos[d / r] - d * Sqrt[r^2 - d^2]), {r, d, R}];
      N[Vs + 2 * ( $\pi * R^2 * 1 / 3 - \text{Vk}$ )]
    ]]]
]

```

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MinuPytt[6, 20, 5, 9]
Plot[MinuPytt[6, 20, 5, h], {h, 0, 12}]

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Out[202]= 1500.91

