In[]:=
```
rho (x_) = 3 / (4 * Pi) * M * R^(-3) * Power[1 + (x / R)^2, -5 / 2]
```

Set: Tag Times in rho x_ is Protected.

Out[]=
$$\frac{3\,M}{4\,\pi\,R^3\left(1+\frac{x^2}{R^2}\right)^{5/2}}$$

In[]:=
```
Integrate[3 / (4 * Pi) * M * R^(-3) Power[1 + (x / R)^2, -5 / 2] * 4 * Pi * x^2, {x, 0, r}]
```

Out[]=
$$\frac{M\,r^3}{\left(1+\frac{r^2}{R^2}\right)^{3/2}R^3}\ \text{if}\ \text{Im}\left[\frac{R}{r}\right]>1\ ||\ \text{Im}\left[\frac{R}{r}\right]<-1\ ||\ \text{Re}\left[\frac{R}{r}\right]\neq 0$$

In[]:=
```
U (r_) = -G * M / R * Power[1 + (r / R)^2, -1 / 2]
```

Set: Tag Times in U r_ is Protected.

Out[]=
$$-\frac{G\,M}{\sqrt{1+\frac{r^2}{R^2}}\,R}$$

In[]:=
```
V = (-2 * -G * M / R * Power[1 + (r / R)^2, -1 / 2])^(1 / 2)
```

Out[]=
$$\sqrt{2}\,\sqrt{\frac{G\,M}{\sqrt{1+\frac{r^2}{R^2}}\,R}}$$