```
syms s
```

```
H = 4 / (2 * s + 1)
```

H =

$$\frac{4}{2s+1}$$

```
U = 1 / s^2
```

U =

$$\frac{1}{s^2}$$

```
Y = H * U
```

Y =

$$\frac{4}{s^2\,(2s+1)}$$

```
partfrac(Y)
```

ans =

$$\frac{16}{2s+1}-\frac{8}{s}+\frac{4}{s^2}$$

```
U = 2 / s
```

U =

$$\frac{2}{s}$$

```
Y = H * U
```

Y =

$$\frac{8}{s\,(2s+1)}$$

```
partfrac(Y)
```

ans =

$$\frac{8}{s}-\frac{16}{2s+1}$$

```
U = 1 / s^2 - exp(-2 * s) / s^2
```

U =

$$\frac{1}{s^2} - \frac{e^{-2s}}{s^2}$$

```
Y = H * U
```

Y =

$$-\frac{4\left(\frac{e^{-2s}}{s^2} - \frac{1}{s^2}\right)}{2s+1}$$

```
partfrac(Y)
```

ans =

$$\frac{8e^{-2s} - 8}{s} - \frac{4e^{-2s} - 4}{s^2} - \frac{16e^{-2s} - 16}{2s+1}$$