In[60]:=
```
Series[Exp[-x^4 + x^3 - x^2], {x, 0, 10}]
```

Out[60]=
$$1 - x^2 + x^3 - \frac{x^4}{2} - x^5 + \frac{4\,x^6}{3} - \frac{x^7}{2} - \frac{11\,x^8}{24} + x^9 - \frac{71\,x^{10}}{120} + O[x]^{11}$$

In[61]:=
```
Roots[x^4 + 3 * x^3 - 3 * x^2 + 10 == 0, x]
```

Out[61]=
$$x == \frac{1}{2}\left(-5 - \sqrt{5}\right) \,||\, x == \frac{1}{2}\left(-5 + \sqrt{5}\right) \,||\, x == 1 - i \,||\, x == 1 + i$$

In[62]:=
```
y[x_] = x^3 * Log[x] + Cosh[x]
```

Out[62]=
$$\text{Cosh}[x] + x^3\,\text{Log}[x]$$

In[63]:=
```
y'''[x]
```

Out[63]=
$$11 + 6\,\text{Log}[x] + \text{Sinh}[x]$$

In[64]:=
```
NIntegrate[Sqrt[1 - x], {x, 0, 1}]
```

Out[64]=
```
0.666667
```

In[65]:=
```
Inverse[{{1, 2, 3}, {4, 5, 8}, {3, 2, 1}}]
```

Out[65]=
$$\left\{\left\{-\frac{11}{8}, \frac{1}{2}, \frac{1}{8}\right\}, \left\{\frac{5}{2}, -1, \frac{1}{2}\right\}, \left\{-\frac{7}{8}, \frac{1}{2}, -\frac{3}{8}\right\}\right\}$$

In[66]:=
```
s = NDSolve[{f''[x] == -((Pi^2)/4)(f[x] + 1), f[0] == 0, f[1] == 1}, f, {x, 0, 10}]
```

Out[66]=
$$\left\{\left\{f \to \text{InterpolatingFunction}\left[\right]\right\}\right\}$$

Domain: {{0., 10.}}
Output: scalar

In[67]:=
```
Plot[Evaluate[f[x] /. s], {x, 0, 10}]
```

Out[67]=