

In[8]:= **eqn = y'' + p y' + q y**

Out[8]= $q y + p y' + y''$

In[9]:= **eqn /. y -> mu v**

Out[9]= $q v \mu + p (v \mu)' + (v \mu)''$

In[11]:= **D[a[x] b[x], x]**

Out[11]= $b[x] a'[x] + a[x] b'[x]$

In[7]:= **y'**

Out[7]= y'

In[5]:= **eqn // FullForm**

Out[5]/FullForm= **Plus[Times[q[x], y[x]], Times[p[x], Derivative[1][y][x]], Derivative[2][y][x]]**

In[12]:= **Plus[Times[q[x], y[x]], Times[p[x], Derivative[1][y][x]], Derivative[2][y][x]]**

Out[12]= $q[x] y[x] + p[x] y'[x] + y''[x]$

In[14]:= **(q[x] y[x] + p[x] y'[x] + y''[x]) /. y -> mu v // FullForm**

Out[14]/FullForm= **Plus[Times[q[x], Times[v, \[Mu]][x]], Times[p[x], Derivative[1][Times[v, \[Mu]]][x]], Derivative[2][Times[v, \[Mu]]][x]]**

In[15]:= **D[y[x], x]**

Out[15]= $y'[x]$