In[1]:=
```
ellipticlowpass2ndordersection = A + B * (W1^2 / (s^2 + (W1/C) s + W1^2))
```

Out[1]=
$$A + \frac{B\,W1^2}{s^2 + \frac{s\,W1}{C} + W1^2}$$

In[2]:=
```
s = P (z - 1)/(z + 1)
```

Out[2]=
$$\frac{P\,(-1+z)}{1+z}$$

In[3]:=
```
ellipticlowpass2ndordersection
```

Out[3]=
$$A + \frac{B\,W1^2}{W1^2 + \frac{P^2\,(-1+z)^2}{(1+z)^2} + \frac{P\,W1\,(-1+z)}{C\,(1+z)}}$$

In[4]:=
```
Together[ExpandAll[%]]
```

Out[4]=
$$(A\,C\,P^2 - A\,P\,W1 + A\,C\,W1^2 + B\,C\,W1^2 - 2\,A\,C\,P^2\,z + 2\,A\,C\,W1^2\,z + 2\,B\,C\,W1^2\,z + A\,C\,P^2\,z^2 + A\,P\,W1\,z^2 + A\,C\,W1^2\,z^2 + B\,C\,W1^2\,z^2) / (C\,P^2 - P\,W1 + C\,W1^2 - 2\,C\,P^2\,z + 2\,C\,W1^2\,z + C\,P^2\,z^2 + P\,W1\,z^2 + C\,W1^2\,z^2)$$

In[6]:=
```
Collect[Numerator[%4], z]
```

Out[6]=
$$A\,C\,P^2 - A\,P\,W1 + A\,C\,W1^2 + B\,C\,W1^2 + (-2\,A\,C\,P^2 + 2\,A\,C\,W1^2 + 2\,B\,C\,W1^2)\,z + (A\,C\,P^2 + A\,P\,W1 + A\,C\,W1^2 + B\,C\,W1^2)\,z^2$$

In[7]:=
```
Collect[Denominator[%4], z]
```

Out[7]=
$$C\,P^2 - P\,W1 + C\,W1^2 + (-2\,C\,P^2 + 2\,C\,W1^2)\,z + (C\,P^2 + P\,W1 + C\,W1^2)\,z^2$$

In[8]:=
```
Collect[%6 / (C P^2 + P W1 + C W1^2), z]
```

Out[8]=
$$\frac{A\,C\,P^2 - A\,P\,W1 + A\,C\,W1^2 + B\,C\,W1^2}{C\,P^2 + P\,W1 + C\,W1^2} + \frac{(-2\,A\,C\,P^2 + 2\,A\,C\,W1^2 + 2\,B\,C\,W1^2)\,z}{C\,P^2 + P\,W1 + C\,W1^2} + \frac{(A\,C\,P^2 + A\,P\,W1 + A\,C\,W1^2 + B\,C\,W1^2)\,z^2}{C\,P^2 + P\,W1 + C\,W1^2}$$

In[9]:=
```
Collect[%7 / (C P^2 + P W1 + C W1^2), z]
```

Out[9]=
$$\frac{C\,P^2 - P\,W1 + C\,W1^2}{C\,P^2 + P\,W1 + C\,W1^2} + \frac{(-2\,C\,P^2 + 2\,C\,W1^2)\,z}{C\,P^2 + P\,W1 + C\,W1^2} + z^2$$