```
> ASY:= (L*C1*C-R*C2)/(L*C1*C+R*C2);
```

$$ASY := \frac{L\,C1\,C - R\,C2}{L\,C1\,C + R\,C2}$$

```
> ASYERL:= (diff(ASY,L))^2;
```

$$ASYERL := \left(\frac{C1\,C}{L\,C1\,C + R\,C2} - \frac{(L\,C1\,C - R\,C2)\,C1\,C}{(L\,C1\,C + R\,C2)^2}\right)^2$$

```
> ASYERR:= (diff(ASY,R))^2;
```

$$ASYERR := \left(-\frac{C2}{L\,C1\,C + R\,C2} - \frac{(L\,C1\,C - R\,C2)\,C2}{(L\,C1\,C + R\,C2)^2}\right)^2$$

```
> ASYER:=ASYERL*L+ASYERR*R;
```

$$ASYER := \left(\frac{C1\,C}{L\,C1\,C + R\,C2} - \frac{(L\,C1\,C - R\,C2)\,C1\,C}{(L\,C1\,C + R\,C2)^2}\right)^2 L + \left(-\frac{C2}{L\,C1\,C + R\,C2} - \frac{(L\,C1\,C - R\,C2)\,C2}{(L\,C1\,C + R\,C2)^2}\right)^2 R$$

```
> simplify(ASYER);
```

$$4\,\frac{C1^2\,C^2\,R\,C2^2\,L\,(R+L)}{(L\,C1\,C + R\,C2)^4}$$

```
> asyer:=sqrt(");
```

$$asyer := 2\,\sqrt{\frac{C1^2\,C^2\,R\,C2^2\,L\,(R+L)}{(L\,C1\,C + R\,C2)^4}}$$

```
> C1:=1:C2:=1:C:=1;
```

$$C := 1$$

```
> asyer;
```

$$2\,\sqrt{\frac{R\,L}{(R+L)^3}}$$

```
> L:=N/2:R:=N/2;
```

$$R := \frac{1}{2}\,N$$

```
> asyer:simplify(");
```

$$\sqrt{\frac{1}{N}}$$

```
> C1:='C1':C2:='C2':C:='C':L:='L':R:='R';
```

$$R := R$$

```
> DS:=(L*C1*C-R*C2)/QR;
```

$$DS := \frac{L\,C1\,C - R\,C2}{QR}$$

```
> DDS:=(diff(DS,L))^2*L+(diff(DS,R))^2*R;
```

$$DDS := \frac{C1^2\,C^2\,L}{QR^2} + \frac{C2^2\,R}{QR^2}$$

```
> simplify(DDS);
```

$$\frac{C1^2\,C^2\,L + C2^2\,R}{QR^2}$$

```
> dDS:=sqrt(");
```

$$dDS := \sqrt{\frac{C1^2\,C^2\,L + C2^2\,R}{QR^2}}$$