| POLES | ZEROS |
|---|---|
| -1 | |
| -4 | |

$$KGH = \frac{K}{(s+1)(s+4)}$$

| POLES | ZEROS |
|---|---|
| -1 | |
| -4 | |
| -2 ± j | |

2 complex poles added

$$KGH = \frac{K}{(s+1)(s+4)(s^2+2s+2)}$$

| POLES | ZEROS |
|---|---|
| -1 | 0 ± 2j |
| -4 | |
| -2 ± j | |

2 complex zeros added

$$KGH = \frac{K(s^2+4)}{(s+1)(s+4)(s^2+2s+2)}$$

| POLES | ZEROS |
|---|---|
| -1 | 0 ± 2j |
| -4 | |
| -2 ± j | |
| -6 | |

1 real pole added

$$KGH = \frac{K(s^2+4)}{(s+1)(s+4)(s^2+2s+2)(s+6)}$$

| POLES | ZEROS |
|---|---|
| -1 | 0 ± 2j |
| -4 | |
| -2 ± j | |
| -5 | |

real pole shifted right by +1

$$KGH = \frac{K(s^2+4)}{(s+1)(s+4)(s^2+2s+2)(s+5)}$$

| POLES | ZEROS |
|---|---|
| 0 | 0 ± 2j |
| -3 | |
| -1 ± j | |
| -4 | |

All poles shifted right by +1

$$KGH = \frac{K(s^2+4)}{s(s+3)(s^2+2s+2)(s+4)}$$