

```
In[1]:= H = { {h1,  $\lambda$ }, { $\lambda$ , h2}};  
v = Eigenvalues[H];  
 $\lambda 1$  = v[[1]];  
 $\lambda 2$  = v[[2]];  
A = Sqrt[1 + (( $\lambda 1$  - h1) /  $\lambda$ ) ^ 2];  
B = Sqrt[1 + (( $\lambda 2$  - h1) /  $\lambda$ ) ^ 2];  
Simplify[1 / A2 + 1 / B2]
```

Out[7]= 1