```
%a
s1 = [0.6  0.0  -0.8  0.0]';
T1 = [-2  3  3]';
normalized_s1 = s1/norm(s1);
w1 = T1 * normalized_s1'
```

```
w1 = 3×4
        -1.2           0         1.6           0
         1.8           0        -2.4           0
         1.8           0        -2.4           0
```

```
%b
s2 = [0.8   0.0  0.6  0.0]';
T2 = [ 2  -1  1]';
normalized_s2 = s2/norm(s2);
w2 = T2 * normalized_s2'
```

```
w2 = 3×4
         1.6           0         1.2           0
        -0.8           0        -0.6           0
         0.8           0         0.6           0
```

```
%c
normalized_s1'* normalized_s2 == 0
```

```
ans = logical

   1
```

```
%d
s3 = [1.4  1  -0.2  1]';
normalized_s3 = s3/norm(s3);
w3 = w1 + w2;
T3 = w3 / normalized_s3'
```

```
T3 = 3×1
   8.6695e-17
            1
            2
```

```
%e
T4 = [0 1 2]';
s4 = w3 \ T4
```

```
Warning: Rank deficient, rank = 2, tol =  3.979991e-15.
s4 = 4×1
         0.7
           0
        -0.1
           0
```