

23b. Parts i)b) and i)c)

Part i)b), with $\varepsilon=1$

```
In[ * ]:= 2 j l + 3 a == 2 j r - 3 a /. a -> (n u l - j l) / 2 // . sub2p // Simplify
```

```
Out[ * ]:= True
```

```
In[ * ]:= 2 j p + 3 a == 2 j r - 3 a /. a -> (n u p - j p) / 2 // . sub2p // Simplify
```

```
Out[ * ]:= True
```

Part i)c)

Now $\varepsilon=-1$.

```
In[ * ]:= 2 j r - 3 a == 2 j l + 3 a /. a -> (j r + n u r) / 2 // . sub2p // Simplify
```

```
Out[ * ]:= True
```

```
In[ * ]:= 2 j p - 3 a == 2 j l + 3 a /. a -> (j p + n u p) / 2 // . sub2p // Simplify
```

```
Out[ * ]:= True
```