15a. Shift operators

Check of (3.78)

```
In[ ]:= Clear[h, p, r]
        sh[3, 1, phi[h, p, r, p, nu], subtriv] / phi[h + 3, p + 1, r + 1, p + 1, nu] // Simplify
        sh[-3, 1, phi[h, p, r, p, nu], subtriv] / phi[h - 3, p + 1, r - 1, p + 1, nu] // Simplify
```

$$\text{Out[ ]=}\ \frac{(4 + h + 2\,nu + 2\,p - r) \times (2 + p + r)}{8 \times (1 + p)}$$

$$\text{Out[ ]=}\ \frac{(2 + p - r) \times (4 - h + 2\,nu + 2\,p + r)}{8 \times (1 + p)}$$

```
In[ ]:=
        sh[3, -1, phi[h, p, r, p, nu], subtriv] / phi[h + 3, p - 1, r + 1, p - 1, nu] // Simplify
        sh[-3, -1, phi[h, p, r, p, nu], subtriv] / phi[h - 3, p - 1, r - 1, p - 1, nu] // Simplify
```

$$\text{Out[ ]=}\ -\frac{p\,(-h - 2\,nu + 2\,p + r)}{4 \times (1 + p)}$$

$$\text{Out[ ]=}\ -\frac{p\,(h - 2\,nu + 2\,p - r)}{4 \times (1 + p)}$$