# Component arithmetic

Tensor plus scalar adds scalar to each tensor component.

```
A = ((a,b),(c,d))
A + 10
```

$$\begin{bmatrix} a+10 & b+10 \\ c+10 & d+10 \end{bmatrix}$$

The product of two tensors is the Hadamard (element-wise) product.

```
A = ((a,b),(c,d))
A A
```

$$\begin{bmatrix} a^2 & b^2 \\ c^2 & d^2 \end{bmatrix}$$

Tensor raised to a power raises each component to the power.

```
A = ((a,b),(c,d))
A^2
```

$$\begin{bmatrix} a^2 & b^2 \\ c^2 & d^2 \end{bmatrix}$$