

# tensor.acos

## tensor.acos

...

```
Copy fnacos(self:@Tensor)->Tensor;
```

...

Computes the arccosine (inverse of cosine) of all elements of the input tensor.

### Args

- self
- (@Tensor
- ) - The input tensor.
- 

### Returns

A newTensor of the same shape as the input tensor with the arccosine value of all elements in the input tensor.

### Type Constraints

Constrain input and output types to fixed point tensors.

### Example

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```
Copy usecore::array::{ArrayTrait,SpanTrait};
```

```
useorion::operators::tensor::{TensorTrait,Tensor,FP8x23Tensor}; useorion::numbers::{FP8x23,FixedTrait};
```

```
fnacos_example()->Tensor { lettensor=TensorTrait::new( shape:array![2].span(), data:array!  
[FixedTrait::new_unscaled(0,false), FixedTrait::new_unscaled(1,false),] .span(), );
```

```
returntensor.acos(); }
```

```
[13176794,0] // The fixed point representation of // [1.5707..., 0]
```

...

[Previous tensor.atan](#) [Next tensor.sqrt](#)

Last updated3 months ago