Docs

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Abstract

Contents

Docs

vector

- add()
- dot()
- norm()

add

Add two or more vectors.

```
1 - #add((1, 2), (3, 4))
2 - #add((1, 2, 3), (4, 5, 6))
3 - #add((1, 2), (3, 4), (5, 6))
```

- (4, 6)
- (5, 7, 9)
- (9, 12)

Parameters

```
add(..vecs: array) -> array
```

..vecs `array`

The vectors to add.

dot

Calculate the dot product of two vectors.

```
1 - #dot((1, 2), (3, 4))
2 - #dot((1, 2, 3), (4, 5, 6))
3 - #dot((1, 2, 3, 4), (5, 6, 7, 8))
4
5 Comparison with the norm:
6 #let v = (2, 0, 2, 5)
7 - #dot(v, v)
8 - #calc.pow(norm(v), 2)
```

- 11
- 32
- 70

Comparison with the norm:

- 33
- 33

See also: norm()

Parameters

```
dot(
  u: array,
  v: array
) -> float
```

u `array`

The first vector.

v `array`

The second vector.

norm

Calculate the norm of a vector.

```
- #norm((1, 2))
- #norm((1, 2, 3))
- #norm((1, 2, 3, 4))

Comparison with the dot product:
#let v = (2, 0, 2, 5)
- #norm(v)
- #calc.sqrt(dot(v, v))
```

- 2.23606797749979
- 3.7416573867739413
- 5.477225575051661

Comparison with the dot product:

- 5.744562646538029
- 5.744562646538029

See also: dot()

Parameters

norm(v: `array`) -> `float`

v `array`

The vector to calculate the norm of.