fantezi kod

common algebraic structures in javascript

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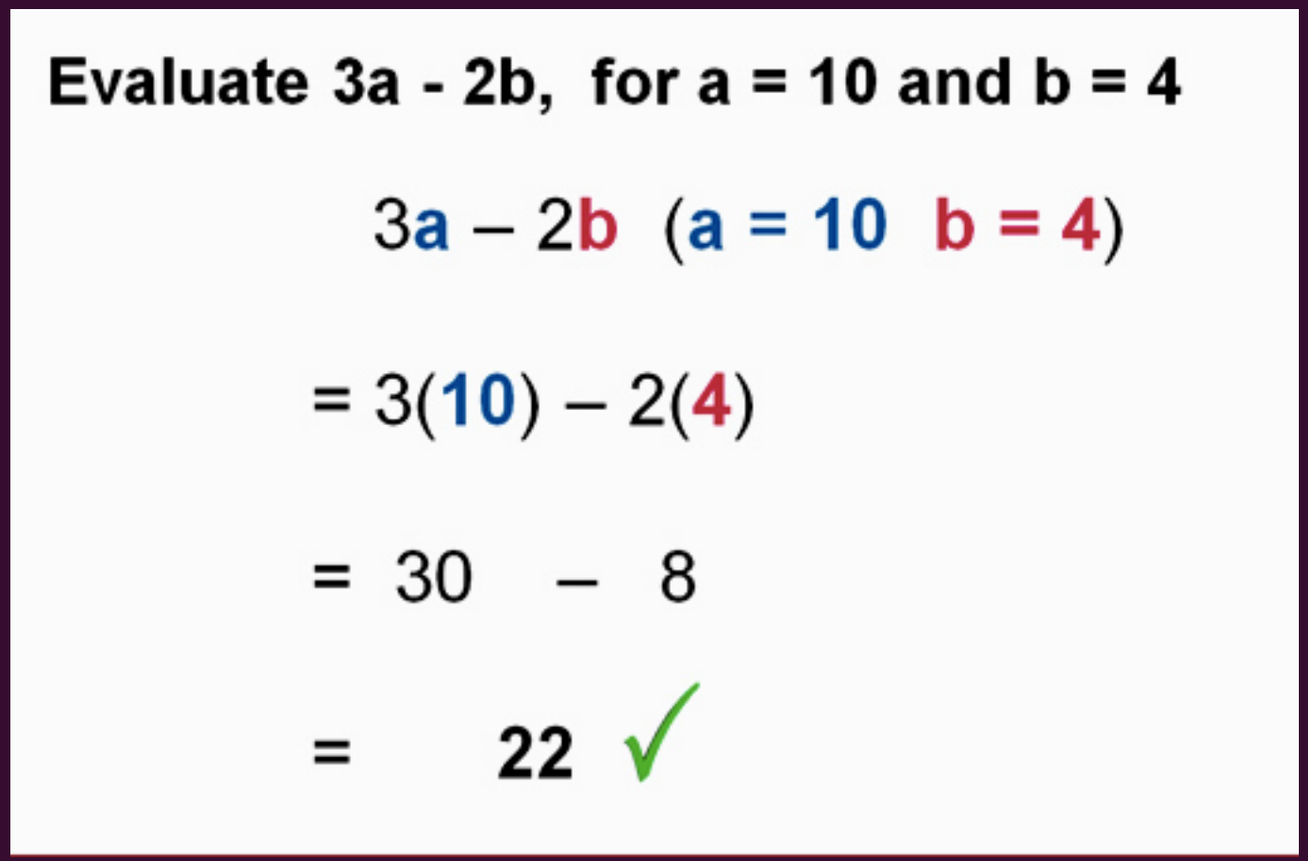
software developer

@deliveryhero

An algebra is a set of values, a set of operators that it is closed under and some laws it must obey.

780 - 8. century
Al-Khwārizmī’s al-Kitāb al-muḫtasar fī ḥisāb al-ğabr wa-l-muqābala

An algebra is a set of values, a set of operators that it is closed under and some laws it must obey.



http://passyworldofmathematics.com/algebra-substitution-positive-numbers/

Each Fantasy Land algebra is a separate specification. An algebra may have dependencies on other algebras which must be implemented.

github.com/fantasyland/fantasy-

some notations

```
::  is a member of
→  function type
⇝  method type constructor
```

examples

```
true     :: Boolean
fatih    :: Person
42       :: Integer
string   → boolean
boolean  → boolean
```

algebros

Setoid

A value has a steroid must provide an equals method.

reflexivity
`a.equals(a) === true`

symmetry
`a.equals(b) === b.equals(a)`

transitivity
`if   a.equals(b) and b.equals(c)`
`then a.equals(c)`

Semigroup

A value which has a Semigroup must provide a concat method.

```
a.concat(b)
```

Monoid

A value which has a Monoid must implement a Semigroup and also include an empty method.

```
a.empty().concat(b)
```

Filterable

A value which has a Filterable must provide a filter method.

```
a.filter(x ⇒ true)
```

Filterable

A value which has a Filterable must provide a filter method.

```
a.filter(x ⇒ true)
```

Functor

A value which has a Functor must provide a map method.

```
[].map(x ⇒ x * 2)
```

Apply

A value that implements the Apply specification must also implement the Functor specification.

A value which has an Apply must provide an ap method. The ap method takes one argument.

```
[].ap(func)
```

Chain & Monad

chain

```
m.chain(f).chain(g) ===
m.chain(x ⇒ f(x).chain(g))
```

monad

```
M.of(a).chain(f) ===
m.chain(M.of)
```

implementations

- Promises
- Folktale
- jQuery

Burak Can 1:05 PM

fantasyland spec iste. ramda da fantasyland implemente ediyor(buyuk oranda). fantasyland implemente eden libraryler de birbirleriyle uyumlu calisabiliyorlar

sunumunu 2 cumlede ozetledim @fatiherikli kusra bakma 😄

Burak Can 1:20 PM

biz de ramda (fantasy ramda) ve monet kullaniyoz

Burak Can 1:23 PM

@fatiherikli fantasyland speci algebraic abstractionlari da temel olarak ogrenmek icin guzel, ondan da bahset bence (edited)

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