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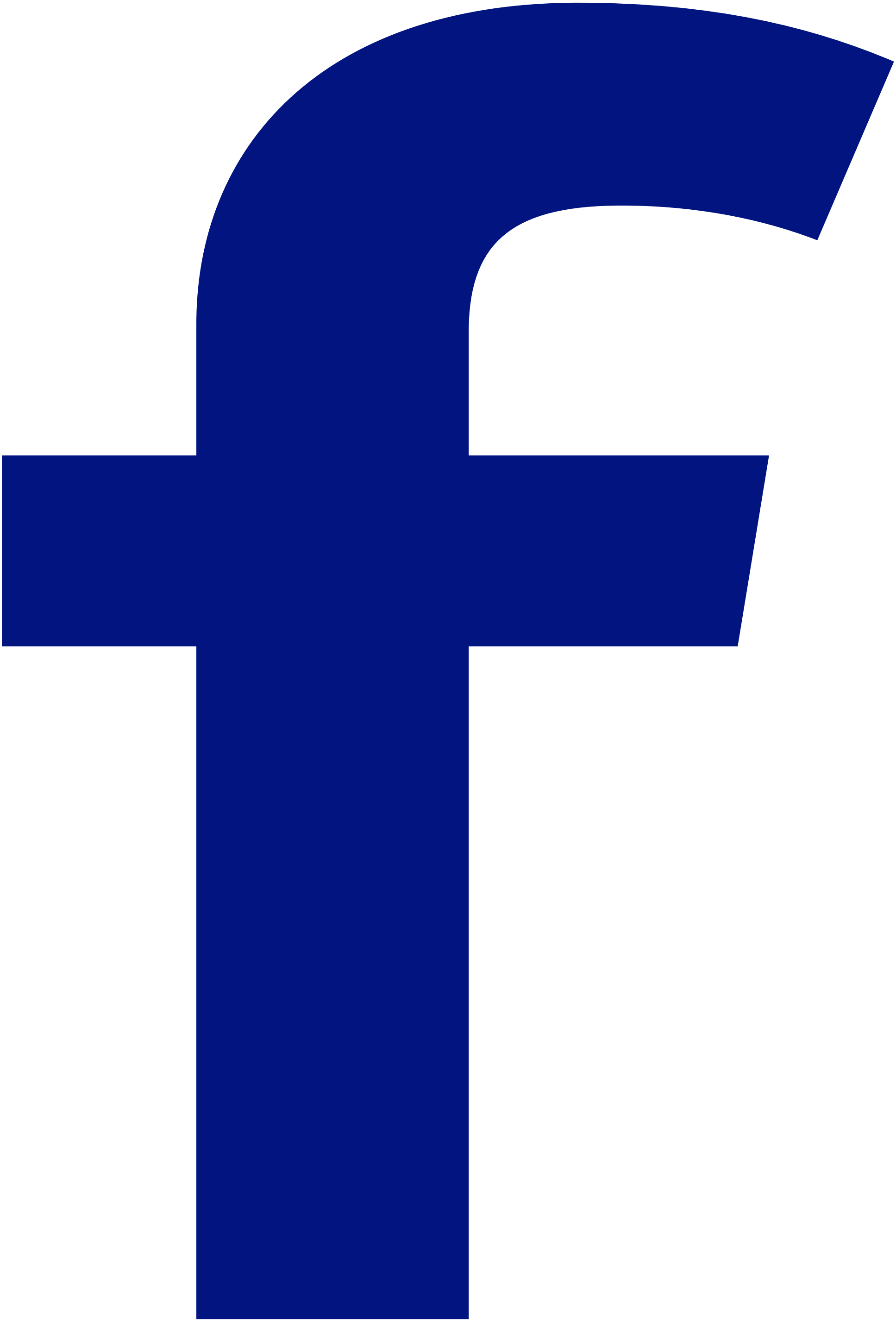

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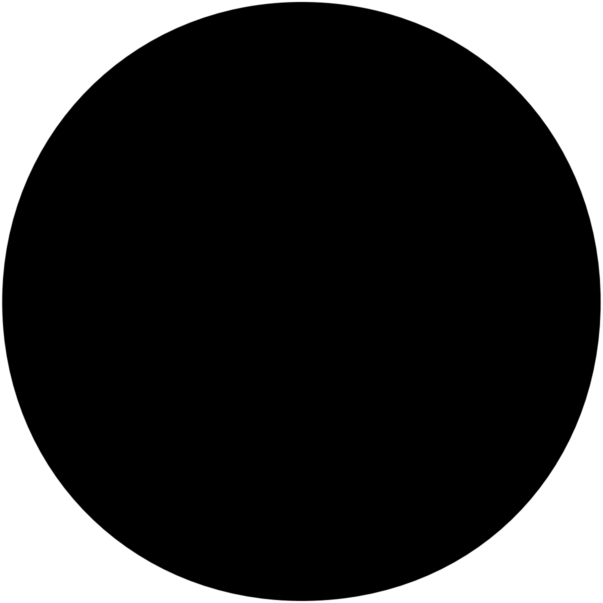

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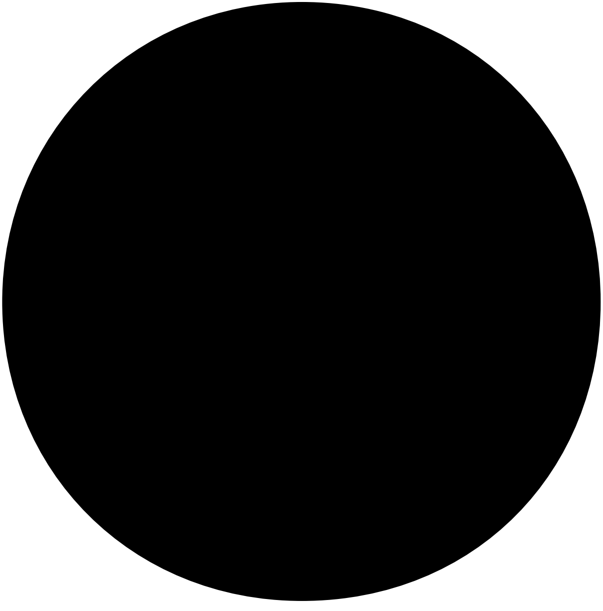

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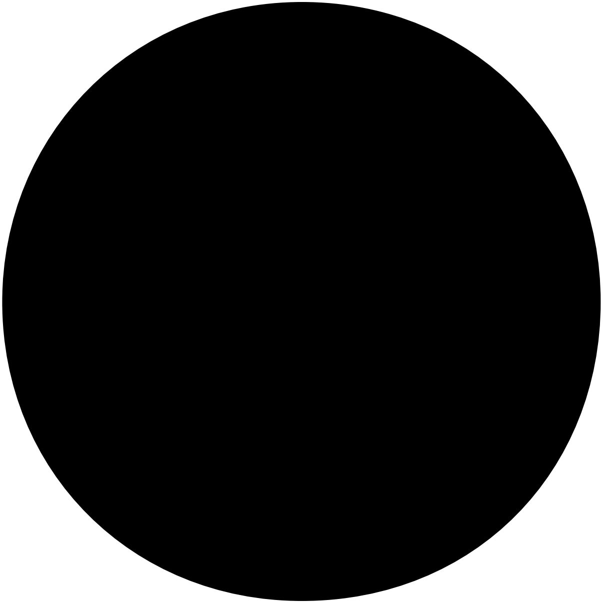

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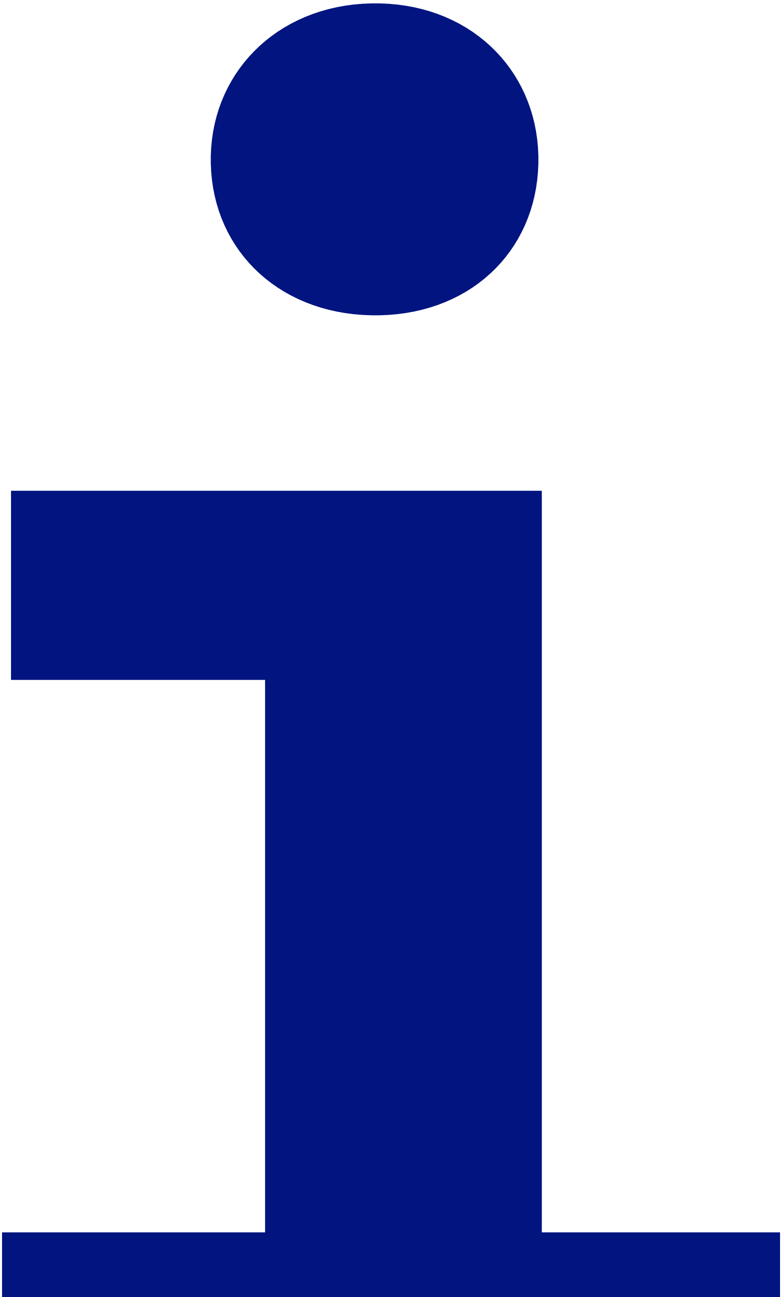

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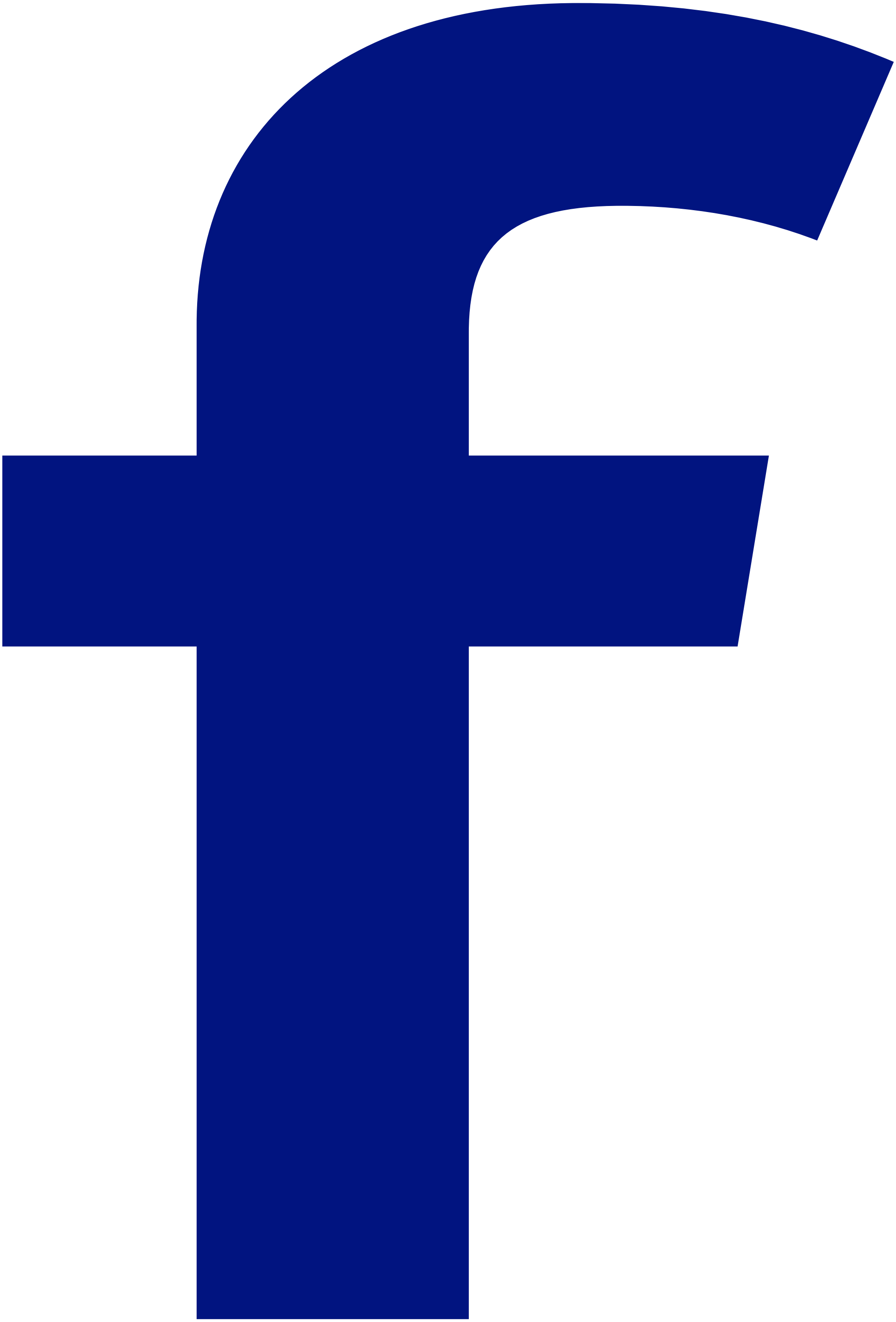

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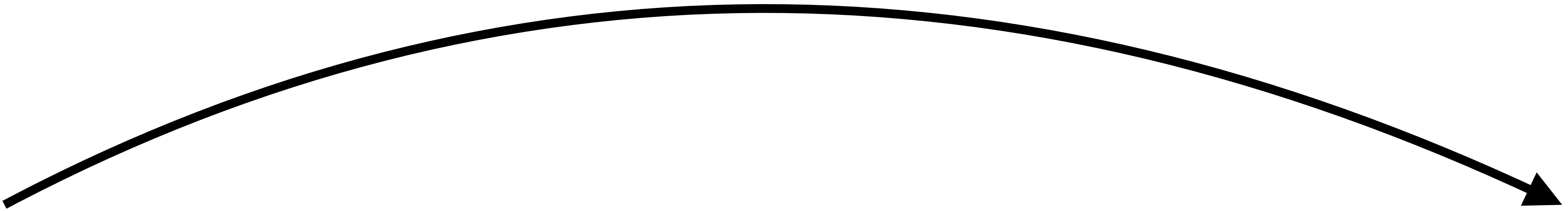

a * b

```
a.times(b)
```

```
class Fraction(val numerator: Int, val denominator: Int) {
    override fun toString(): String = "$numerator/$denominator"
}
```

```kotlin
operator fun Fraction.times(other: Fraction) =
    Fraction(numerator * other.numerator, denominator * other.denominator)
```

```
println(Fraction(2, 3) * Fraction(2, 5))
```

Operator overloading

$$\begin{tikzcd} \texttt{a * b} \arrow[rr, bend left] & & \texttt{a.times(b)} \end{tikzcd}$$

```kotlin
class Fraction(val numerator: Int, val denominator: Int) {
    override fun toString(): String = "$numerator/$denominator"
}

operator fun Fraction.times(other: Fraction) =
    Fraction(numerator * other.numerator, denominator * other.denominator)


println(Fraction(2, 3) * Fraction(2, 5))
```

```
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```

Operator overloading
rules

- each operator has a complementary function
- implement the function as a member or extension function
- operator precedence cannot be changed

❗ do not abuse operator overloading - only use it when the behaviour can be deduced intuitively