

# Metody Programowania lista 1

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# 1 Ćwiczenie 1

## 1.1

---

```
>10  
10
```

---

## 1.2

---

```
>( + 5 3 4 )  
12
```

---

## 1.3

---

```
>( - 9 1 )  
8
```

---

## 1.4

---

```
>( / 6 2 )  
3
```

---

## 1.5

---

```
>( + ( * 2 4 ) ( - 4 6 ) )  
  
6
```

---

## 1.6

---

```
>(define a 3)  
>( define b ( + a 1 ) )  
>( + a b ( * a b ) )  
  
19
```

---

## 1.7

---

```
>( = a b )  
  
#f
```

---

## 1.8

---

```
>( if ( and (> b a ) (< b (* a b ) ) ) b a)
```

4

---

## 1.9

---

```
>( cond [(= a 4) 6]  
        [(= b 4) (+ 6 7 a ) ]  
        [ else 25])
```

16

---

## 1.10

---

```
>( + 2 ( if (> b a ) b a ) )
```

6

---

## 1.11

---

```
>(* ( cond [( > a b ) a ]  
          [(< a b ) b ]  
          [ else  
            -1])  
   (+ a 1) )
```

16

---

## 2 Ćwiczenie 2

$$\frac{5 + 4 + (2 - (3 - (6 + \frac{4}{5})))}{3(6 - 2)(2 - 7)}$$

---

```
(/ ({+ 5 4 (- 2 {- 3 (+ 6 {/ 4 5})})}) {* 3 (- 6 2 ) (- 2 7 )})
```

---

## 3 Ćwiczenie 3

## 4 Ćwiczenie 4

---

```
#lang racket
(define (sum-of-squares a b)
  (+ (* a a) (* b b)))
(define (max a b)
  (cond [(> a b) a]
        [else b]))
(define (sum-of-squares-of-2-largest a b c)
  (cond [(> a b) (sum-of-squares a (max b c))]
        [else (sum-of-squares b (max a c))]))
```

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