

znajdź minimum

The image shows the Scratch 'Zmienne' (Variables) menu on the left and a 'liczby' (numbers) list on the right. The 'Zmienne' menu has 'Utwórz zmienną' (Create variable) and 'Stwórz listę' (Create list) buttons. The 'liczby' list contains 10 numbers: 8, 4, 1, 1, 9, 9, 3, 6, 6, 1. A 'min' variable is shown at the bottom with a value of 0. Green and blue arrows point from the 'Utwórz zmienną' and 'Utwórz listę' buttons to the corresponding elements in the Scratch environment.

```
when clicked on green flag  
  delete everything from list  
  say "Losuję 10 cyfr" przez 2 sekund  
  repeat 10 times  
    add "losuj liczbę od 1 do 10" to list  
  say "Kliknij m nie, a znajdę najmniejszą z tych liczb" przez 2 sekund  
  stop script
```

The 'Zmienne' menu on the left shows 'max' and 'min' variables checked, and 'nr' variable unchecked. The script on the right finds the minimum value in the 'liczby' list.

```
when this sprite clicked  
  set min to element 1 of list  
  set nr to 2  
  repeat 10 times  
    if element nr of list < min then  
      set min to element nr of list  
    otherwise  
      set nr to nr + 1  
  say "Znalazłem min, to liczba..." i min  
  stop script
```

znajdź maximum

The image shows a Scratch project for finding the maximum value in a list. The script on the left is as follows:

```
when space key is pressed
  set max to element 1 of list
  set nr to 2
  repeat 10 times
    if element nr of list > max then
      set max to element nr of list
    otherwise
      change nr by 1
  end repeat
  say "Znalazłem max, to liczba... i max"
  stop script
```

The stage shows a character named Giga in a blue corridor. A list of numbers is displayed on the left:

liczby
1 34
2 25
3 78
4 61
5 17
6 30
7 63
8 59
9 7
10 93

Below the list, the minimum and maximum values are shown: min 7, max 93. A speech bubble from Giga says: "Znalazłem max, to liczba...93".

Stage settings: Duszek: Giga, x: 3, y: -14, Pokaż: [on], Rozmiar: 50, Kierunek: 90, Scena: Tła 2.