

Lists



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Here's an example of using pattern matching to compute the sum of a list:

```
let rec sum lst =  
  match lst with  
  | [] -> 0  
  | h :: t -> h + sum t
```

```
val sum : int list -> int = <fun>
```

Pattern Matching



Syntax.

```
match e with  
| p1 -> e1  
| p2 -> e2  
| ...  
| pn -> en
```

Each of the clauses $p_i \rightarrow e_i$ is called a *branch* or a *case* of the pattern match.