

```
function test_range = eval_polynomial(problem_domain, current_position_vector,  
original_domain, exponent_vector, transpose_vector)  
  
    num_items = size(original_domain,2);  
    D = size(problem_domain,1);  
    test_range = zeros(1,num_items);  
  
    for i = 1 : D/2  
  
        temp_domain = original_domain;  
  
        if(transpose_vector(i) == 1)  
  
            temp_domain = original_domain';  
  
        endif  
  
        exp = exponent_vector(i);  
        coef = problem_domain(i, current_position_vector(i));  
        interc = problem_domain(i + D/2, current_position_vector(i));  
  
        test_range = test_range + (coef*(temp_domain .- interc)).^exp;  
  
    endfor  
  
endfunction
```